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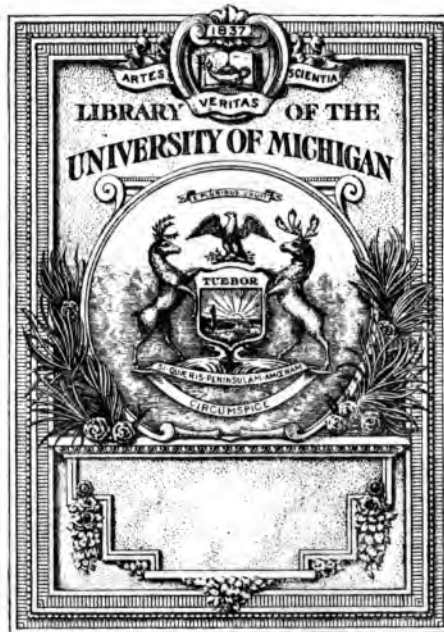
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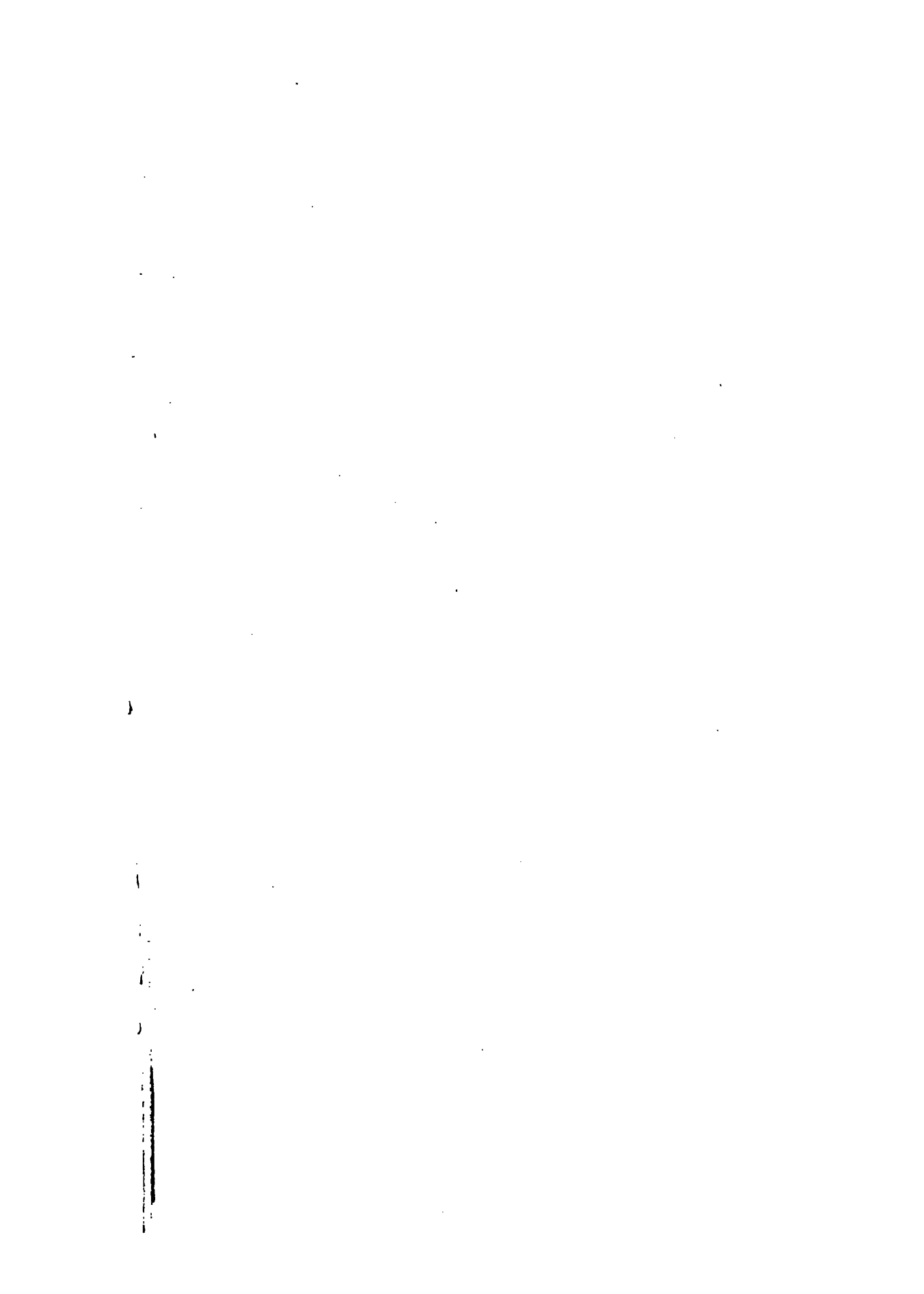
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REPORT  
ARCHÆOLOGICAL  
ONTARIO  
1903









Annual  
Archæological Report  
1903



BEING PART OF  
Appendix to the  
Report of The Minister of Education  
Ontario

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*T O R O N T O .*

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319152



## PRESENTATION.

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HON. RICHARD HARCOURT, LL.D., K.C.,

*Minister of Education.*

SIR,—In presenting to you the accompanying report on the archæology of the Province, it is pleasing to be able to state that the year has been quite a satisfactory one in so far as the museum is concerned.

Office work demands most of the curator's time, partly on account of correspondence, partly because the large number of specimens (now nearly 27,000) on exhibition, require a corresponding amount of care; but to a very great extent also for the reason that his appointment as superintendent of the Provincial Museum, as a whole, makes it necessary to devote a good deal of attention to general oversight.

It is hoped that during 1904 something may be accomplished in the way of field work, in response to requests that have reached the museum from so many quarters.

The increase in the quantity of material demands more case-room, and the curator's duties cannot be accomplished in anything like a proper way without better office and workshop accommodation.

I have the honor to be

Yours respectfully,

DAVID BOYLE.

Education Department of Ontario,  
Toronto, December 23rd, 1903.



## ACCESSIONS TO THE MUSEUM.

- 25,001 Wooden extension candlestick. Candlesticks of this kind were used by shoemakers and wagonmakers over fifty years ago. W. J. Wintemberg.
- 25,002-004 Iron lamps used in Oxford and Waterloo counties, in the early part of last century. W. J. Wintemberg.
- 25,005 Sheet metal lamp used by one of the gold workers, in the African village at the Pan-American Exposition, Buffalo, U.S.A. W. J. Wintemberg.

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25,006-20 from Dr. R. W. Large.

- 25,006 Wooden spoon or ladle. Tay township, Simcoe co.
- 25,007-11 Bone and horn awls. Tay township, Simcoe co.
- 25,012 Fragment of a small clay vessel. Tay township, Simcoe co.
- 25,013 Stem of a soapstone pipe. Tay township, Simcoe co.
- 25,014 Worked bone. Tay township, Simcoe co.
- 25,015 Part of a bone harpoon point. Tay township, Simcoe co.
- 25,016-17 Bone awls. Tiny township, Simcoe co.
- 25,018 Brass ring. Tiny township, Simcoe co.
- 25,019 Iron arrowhead. Tiny township, Simcoe co.
- 25,020 Iron pipe. Tiny township, Simcoe co.

- 
- 25,021-3 Old flint lock ; double barbed muskrat spear of iron, seventeen inches long (for using through the ice); and a rapier blade, two feet long exclusive of the handle portion. Found on the banks of the Talbot river, at Bolsover, per G. E. Laidlaw, from Jas. McGirr.
- 25,024 Wooden beater, used in the manufacture of tapa cloth from the inner bark of the mulberry, South Sea Island. David Boyle.
- 25,025 Ngae Yen. Two-stringed musical instrument, Canton, China. (Purchase.)

---

25,026-44 presented by Howard R. Kelcy.

- 25,026-29 Pottery fragments, lot 7, con. 10, Innisfil tp.
- 25,030-32 Fragments of pipes, lot 7, con. 10, Innisfil tp.
- 25,033-36 Bone awls, lot 7, con. 10, Innisfil tp.
- 25,037-38 Bone beads, lot 7, con. 10, Innisfil tp.
- 25,039 Shell of unio, lot 7, con. 10, Innisfil tp.
- 25,040-43 Rubbing stones, lot 7, con. 10, Innisfil tp.
- 25,044 Broken celt, lot 7, con. 10, Innisfil tp.

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25,045-51 presented by F. W. Waugh.

- 25,045 Bone needles, Brant county.
- 25,046 Bone specimen, Brant county.
- 25,047 Portion of the carapace of *Chrysemys picta*, Indian village site, Brantford tp., Brant co.
- 25,048-51 Various animal bones, Indian village site, Brantford tp., Brant co.



- 25,052 Bone apple-scoop used in Yorkshire, England, many years ago. T. Ware, per W. J. Wintenberg.  
 25,053. Bone harpoon. W. J. Wintenberg.

- 
- 25,054. Very fine banner stone, North Easthope tp., Perth co. Mr. W. J. Fraser, Toronto.  
 25,055 Bone in preparation for making fish hooks; from a mound. W. C. Mills, Curator of the Ohio Archæological and Historical Society's Museum, Columbus, Ohio.  
 25,056 Piece of human frontal bone from an earthwork, Malahide tp. R. T. Anderson, Aylmer, Ont.  
 25,057 Gorget (subsequently used for whetting or smoothing), lot 8, con. 10, Blenheim tp. G. Campbell, per W. J. Wintenberg.  
 25,058 Huronian slate object, Blanchard tp. Jno. McEwen, per W. Matheson.

---

From 25,059-438 from J. P. Hunt.

- 25,059 Grooved axe, T. Forbner, Delaware tp.  
 25,060 Grooved axe, West London, Ont. Mr. Lawrence.  
 25,061 Grooved axe, lot 21, con. 7, E. Nissouri tp. D. Wilkie.  
 25,062 Grooved axe, lot 6, con. 9, Enniskillen tp. W. A. Brock.  
 25,063 Grooved axe, Grovesend, Elgin Co., Ont. C. A. Stalter.  
 25,064 Grooved axe, Michigan. J. B. Watson.  
 25,065 Grooved axe, procured from Indians about 1840, by Mr. Holman, of London, Ont.  
 25,066 Gorget, lot 8, con. 3, London tp. Miss Webster.  
 25,067-70 Gorgets. On banks of Otter Creek near Tilsonburg. C. Wilcox.  
 25,071 Gorget, lot 31, con. 1, Westminster tp. J. Dale.  
 25,072 Gorget, con. 11, East Nissouri tp. J. Bolton.  
 25,073 Gorget, con. 9, East Nissouri tp. R. Adams.  
 25,074 Gorget, con. 7, East Nissouri tp. J. Newman.  
 25,075 Gorget, con. 9, East Nissouri tp. Jas. Speck.  
 25,076 Gorget, con. 9, East Nissouri tp. R. Adams.  
 25,077 Gorget, Grovesend, Elgin Co., per M. Griffin.  
 25,078 Gorget, lot 25, con. 2, London tp. H. Prince.  
 25,079 Unfinished gorget, Grovesend, Elgin Co. A. Marr.  
 25,080 Unfinished gorget, Thomas farm, Lambeth, Ont.  
 25,081 Unfinished gorget, lot 31, con. 7, E. Nissouri tp. F. Hunt.  
 25,082 Gorget, Blanchard tp. Mr. Pickard.  
 25,083 Catlinite pipe, Dakota, U.S.A. J. Brown.  
 25,084 Clay pipe bowl, Nixon farm, Pond Mills, Westminster tp.  
 25,085 Stone pipe head North West Territories. Mr. McIntosh.  
 25,086 Stone pipe bowl, ploughed up on bank of creek near St. Mary's, Blanchard tp. Mrs. Constable.  
 25,087 Fragment of ornamented pipe-stem, Westminster, Ont. Mr. Dale.  
 25,088-90 Clay pipes, McArthur farm, Westminster tp., Middlesex county.  
 25,093 Unfinished limestone pipe, Middlesex county.

- 25,094-5 Clay pipe bowl, McNeady farm, Orwell, Elgin county.  
 25,096 Stone pipe bowl, given to British officer stationed at London, Can., in 1856, by an Indian. Mr. Screaton.  
 25,097 Catlinite pipe head, N.W. Territory. E. Wilson, Tilsonburg.  
 25,098 Bird effigy pipe, ploughed up at Lion's Head, Georgian Bay, Mr. Roberts.  
 25,099 Clay pipe bowl, Thomas farm, Lambeth, Middlesex county, Ont.  
 25,100 Clay pipe bowl, Edwards' farm Komoka, Middlesex county.  
 25,101 Fragment of a decorated pipe bowl, Middlesex county.  
 25,102 Chisel, Aylmer, Elgin county.  
 25,103 Chisel, Mt. Bridges, Ont. R. Arnold.  
 25,104 Syenite adze, Grovesend, Elgin county. Mr. Griffin.  
 25,105 Gouge. Thomas farm, Lambeth, Middlesex county, Ont.  
 25,106 Hematite celt, Colorado. Mr. Atwater.  
 25,107 Large heavy adze, Langford farm, London tp. Middlesex co.  
 25,108 Limestone celt, in process of manufacture. Langford farm, London tp.  
 25,109 Unfinished celt, Delaware, Westminster tp. R. Gibson.  
 25,110 Celt, Delaware, Westminster tp. R. Gibson.  
 25,111 Celt, made from waterworn pebble, Grovesend, Elgin county. W. Smith.  
 25,112 Celt, in process of manufacture, Grovesend, Elgin county. A. Marr.  
 25,113 Celt, Middlesex county.  
 25,114-5 Hammer stones, E. Nissouri tp. J. Hogarth.  
 25,116 Hammer stone, London tp. J. Corsant.  
 25,117-18 Hammer stone, Barter farm, London tp., Middlesex co.  
 25,119 Hammer stone, Thomas' farm, Lambeth, Ont.  
 25,120 Half of a pick-like banner stone, Ontario county. W. Davis.  
 25,121 Huronian slate banner stone, Westminster tp. Mr. Dale.  
 25,122 Broken "butterfly" banner stone, Walker farm, E. Nissouri.  
 25,123 Banner stone, Grovesend, Elgin county. R. Chute.  
 25,124 "Butterfly" banner stone, Kettle Point, Ont. Dr. McArthur.  
 25,126 Perforated disc, Grovesend, Elgin. Jas. Chute.  
 25,128 Bird amulet, London. Mr. J. Tune, London (city).  
 25,129 Bird amulet, London, con. 5, Westminster tp. Jas. Anderson.  
 25,130 Bird amulet, Scanlon farm, East London. Mr. Scanlon.  
 25,131 Perforated ball-like ceremonial stone, Gallagher farm, 9th con. E. Nissouri tp.  
 25,132 Stone tube, near Hyde Park, London tp. Mr. Mackleborough.  
 25,133 Stone tube, London, Ont. Mr. J. Tune.  
 25,134 Copper bead, dug up on farm of Mr. Pascoe by H. Pascoe, Ontario county.  
 25,135 Copper chisel, found by Capt. Barr on his farm, Pt. Bruce, Elgin county.  
 25,136 Copper spear, sharp at both ends, taken from a mound near Norwich, by Warren Haley.  
 25,137 Curved copper knife, taken from near Norwich, Oxford co. W. Haley.  
 25,138 Copper chisel, London. J. Tune.

- 25,139 Long stone pestle, Pt. Burwell. Wm. Weaver.  
 25,140 Unfinished stone tube or pipe. Little York. Mr. Cook.  
 25,141 Grooved maul or pestle, Kettle Point. Dr. McArthur.  
 25,142 Stone spade or hoe, near Otter Creek, Tilsonburg. C. Wilcox.  
 25,143 Argillite spear head, near Otter Creek, Tilsonburg. C. Wilcox.  
 25,144-5 Large unnotched spear head, Grovesend, Elgin county. J. Marr.  
 25,146-7 Chert drills, Hyde Park, London tp. Mr. Mackleborough.  
 25,148 Gouge, Middlesex county.  
 25,149 Small slate pendant, Middlesex county.  
 25,150 Rubbing stone, Middlesex county.  
 25,151 Worked stone, Middlesex county.  
 25,152 Half of ceremonial stone, Middlesex county.  
 25,153 Huronian slate disc, Middlesex county.  
 25,154 Unfinished stone pipe, Middlesex county. This specimen came without any data as to locality. It is of Huronian slate, and may not have been intended for a pipe.  
 25,155 Long bone awl, found with copper head (25,134), in a mound in Ontario county. H. Pascoe.  
 25,156-206 Bone awls from various places in Western Ontario, Hyde Park. London Tp.  
 25,207-10 Horn Pins, Middlesex county.  
 25,211 Antler worked, Middlesex county, London tp.  
 25,212 Canine tooth of bear, Middlesex county.  
 25,213 Horn arrow tip, Middlesex county.  
 25,214 Horn implement, Middlesex county.  
 25,215 Bone bead, Middlesex county.  
 25,216 Bone implement, Mackleborough farm, Hyde Park, London tp. W. Wade.  
 25,217 Bone or horn implement, Middlesex county.  
 25,218 Shell of *unio undulatus* with umbo ground down until a hole appeared. Middlesex county.  
 25,219 Adze, Bogue farm, Westminster tp., Middlesex county.  
 25,220 Adze, Lot 32, con. 7, East Nissouri tp. J. Wakem.  
 25,221 Adze, Westminster tp. J. Anderson.  
 25,222 Large leaf shaped chert implement. Locality not known.  
 25,223-26 Leaf shaped chert implements, Middlesex county.  
 25,227-45 Leaf shaped chert knives, Middlesex county.  
 25,246-51 Spear heads, Middlesex county.  
 25,252-56 Arrowheads, shouldered but not barbed, Middlesex county.  
 25,257-59 Rotary (?) arrowheads, Middlesex county.  
 25,260 Celt or adze, Grovesend, Elgin County.  
 25,261 Celt or adze, Lambeth township.  
 25,262 Celt or adze, Bogue farm, Westminster township.  
 25,263 Celt or adze, Komoka, Ont.  
 25,264 Celt or adze, Little York, Ont., just east of Toronto.  
 25,265 Celt or adze, Little York, Ont., just east of Toronto.  
 25,266 Celt or adze, Delaware, Westminster tp.  
 25,267 Celt or adze, Grovesend, Elgin county.  
 25,268 Celt or adze, Manitoulin Island. Mr. Rumball.  
 25,269 Celt or adze, Grovesend, Elgin county.

- 25,270 Celt or adze, Grovesend, Elgin county.  
 25,271 Celt or adze, near asylum for insane, London, Ont.  
 25,272 Celt or adze, Delaware, Westminster tp.  
 25,273 Celt or adze, near asylum for insane, London, Ont.  
 25,274 Celt or adze, Grovesend, Elgin county.  
 25,275 Celt or adze, Glanworth, Westminster tp.  
 25,276 Celt or adze, Grovesend, Elgin county. C. Stalter.  
 25,277 Celt or adze, collected by Smithsonian Institute. Washington, D.C.  
 25,278 Celt or adze, Lot 32, con. 7, E. Nissouri tp. (Atwater). J Wakem.  
 25,279 Celt or adze, Grovesend, Elgin county. Mr. Piggot.  
 25,280 Celt or adze, Grovesend, Elgin county. Mr. Tedford.  
 25,281 Celt or adze, Thomas farm, Westminster tp.  
 25,282 Celt or adze, White Oak. Frank Shore.  
 25,283 Celt or adze, Mt. Bridges. R. Arnold.  
 25,284 Celt or adze, Westminster tp. Mr. Horton.  
 25,285 Celt or adze, Grovesend, Elgin County. W. Smith.  
 25,286 Celt or adze, Thomas farm, Lambeth tp.  
 25,287 Celt or adze, Delaware, Westminster tp. R. Gibson.  
 25,288 Celt or adze, Glencoe, Ont. Dr. Weeks.  
 25,289 Celt or adze, Grovesend, Elgin county. Mr. Tedford.  
 25,290 Celt or adze, Thomas farm, Lambeth tp.  
 25,291 Celt or adze, Grovesend, Elgin county.  
 25,292 Celt or adze, Middlesex county.  
 25,293 Celt or adze, E. Nissouri tp. F. McMaster.  
 25,294 Celt or adze, Manitoulin Island. Mr. Rumball.  
 25,295 Celt or adze, Grovesend, Elgin County. Jas. Chute.  
 25,296 Celt or adze, Glanworth, Westminster tp. J. Jones.  
 25,297 Celt or adze, Middlesex county.  
 25,298 Celt or adze, Tilsonburg, Ont.  
 25,299 Celt or adze, Otter Creek. C. W. Wilcox.  
 25,300 Celt or adze, Westminster tp. J. Anderson.  
 25,301 Celt or adze, Grovesend, Elgin county. Mr. Farra.  
 25,302 Celt or adze, Thomas farm, Lambeth tp.  
 25,303 Celt or adze, Thomas farm, Westminster tp.  
 25,304 Celt or adze, Bogue farm, Westminster tp.  
 25,306 Celt or adze, Grovesend, Elgin county. C. Stalter.  
 25,307 Celt or adze, Grovesend, Elgin county. Mr. Wagan.  
 25,308 Celt or adze, Lot 32, con. 7, E Nissouri tp. W. Greason.  
 25,309-13 Celt or adze. Middlesex county.  
 25,314 Chisel, Glendale, Westminster tp. Mr. Dale.  
 25,315 Chisel, Grovesend, Elgin county. Jos. Marr.  
 25,316 Chisel, London tp., per Mr. Mankleborough.  
 25,317 Celt, Middlesex county.  
 25,318-22 Sinkers, Smith farm, Grovesend, Elgin county.  
 25,323-25 Sinkers, James Chute farm, near Pt. Burwell.  
 25,325-28 Sinkers, Tedford farm, Grovesend, Elgin county.  
 25,329-36 Sinkers, Middlesex county.  
 25,337-38 Fragments of gorgets. Thomas farm, Lambeth tp.  
 25,339 Fragment of gorget. Whetler farm, near London, Ont.  
 25,340 Fragment of gorget, near Tilsonburg, Ont. C. Wilcox.

- 25,341-42 Fragments of gorgets, Tilsonburg, Ont. E. Wilson.  
 25,343 Fragment of banner stone, Aylmer, Ont. C. Stalter.  
 25,344 Fragment of banner stone, Glencoe, Ont. Dr. Weeks.  
 25,345 Fragment of bar-amulet, Middlesex county, Ont.  
 25,346-54 Fragments of pipes, Thomas farm, Lambeth tp.  
 25,355 Fragment of pipe bowl, Grovesend, Elgin county, Ont., J. Telford.  
 25,356 Fragment of pipe bowl, McReady farm, Orwell, Yarmouth tp.  
 25,357 Pipe stem, Nixon farm, Pond Mills, Ont.  
 25,358 Pipe stem, McArthur farm, Westminster tp.  
 25,359 Pipe fragment, McArthur farm, Westminster tp.  
 25,360 Pipe fragment, McArthur farm Westminster tp.  
 25,361-62 Fragments of pipe bowls, McArthur farm, Westminster tp.  
 25,363-64 Fragments of pipe bowls, McReady farm, Orwell, Yarmouth tp.  
 25,365-66 Fragments of pipe bowls, Lot 14, Westminster tp, T. Burgers  
 25,367-68 Fragments of pipe bowls, near creek, Pottersburg.  
 25,369-71 Fragments of pipe bowls and stem, Middlesex county.  
 25,372 Fragment of lime-stone pipe, Scanlon farm, London tp.  
 25,373-76 Bone and deer horn awls and pincers, Middlesex county.  
 25,377-83 Worked unio shells, Middlesex county.  
 25,384-85 Worked pieces of slate, Middlesex county.  
 25,386 Huronian slate tube, Glencoe, Ont. Dr. Weeks.  
 25,387 Part of limestone pipe bowl, bearing rude pictographs, Mr. Shaw Wood's farm at the Old Fort.  
 25,388-91 Peculiar forms of chert scrapers, Middlesex county.  
 25,392-415 Arrowheads of various types and materials, Middlesex county.  
 25,422 Chert knife, Middlesex county.  
 25,423 Chipped chert object retaining original outer surface of water-worn pebble on lower edge, Middlesex county.  
 25,424 Peculiarly shaped chert implement, may have been an arrow shaft scraper, Middlesex county.  
 25,425 Arrowhead, broad leaf-shaped blade with small stem, Middlesex county.  
 25,426-34 Pottery fragments, Middlesex and Elgin counties.  
 25,435 Adze, E. Nis-ourri. F. Hunt.  
 25,436 Celt, also used as a cord smoother, (?) Tilsonburg. C. Wilcox.  
 25,437 Celt, with pit on upper and lower surface, showing that it had served as a hammer stone, Grovesend, Elgin county.  
 25,438 Iron tomahawk. C. Wilson, Tilsonburg.

From 25,439-26,085. From Walter M. Dick, Brantford.

- 25,439 Clay pot. Only relic found in grave in which there were nine skeletons. The grave was four feet deep and was covered by a pine stump eighteen inches in diameter. Walker farm, lot 10, con. 3, Onondaga township In former reports owing to misinformation, the Walker and Sealey, (or Sealy) farms, were stated to be in Brantford tp. The farms are near the line between the two townships.

- 25,440 Bead necklace, grave, Walker farm, Onondaga tp.  
25,441-45 Necklaces, (copper beads) birch bark, and coarse cloth, Walker farm.  
25,446 Copper vessel, Walker farm, grave.  
25,447 Stone chipping-block, Sealey farm, lot 9, 1st range south of Hamilton road, Brantford tp.  
25,448 Small mealing-stone or rubbing-stone, E. W. Vanderlip farm.  
25,449 Bone beads, (12 large) from Sealey, Purdy, Walker and Book farms, Brantford and Onondaga tps.  
25,450 Arm-bones of young person, with copper bracelet, Teeple farm, Jerseyville, Ancaster tp.  
25,451 Slender strip of bone, five inches long, pointed, (needle, ?) from grave five feet deep, lot 10, con. 3, Onondaga tp.  
25,452 Stone axe, lot 9, 1st range, Hamilton road, S. Onondaga tp.  
25,453 Iron tomahawk, grave, Walker farm, Onondaga tp.  
25,454 Large shell, (*Busycon perversum*) Walker farm, Onondaga tp.  
25,455 Large shell bead, from *Busycon perversum*, Walker farm.  
25,456 String of small glass beads, Walker farm, Onondaga tp.  
25,457 Clay pot, Walker farm. A beech root grew around the vessel.  
25,458 Tortoise shell, grave, Walker farm, Onondaga tp.  
25,459 Iron axe, grave, Walker farm, Onondaga tp.  
25,460 Stone hammer, Sealey farm, Onondaga tp.  
25,461 Small copper kettle, grave, Walker farm, Onondaga tp.  
25,462 Shell beads, (20) graves, Walker farm, Onondaga tp.  
25,463 Shell breastplate, Teeple farm, Jerseyville, Ancaster tp.  
25,464 Knife, grave, Walker farm, Onondaga tp.  
25,465 Copper kettle with contents, grave, Walker farm, Onondaga tp.  
25,466 Shell of *Busycon perversum*, grave, Walker farm, Onondaga tp.  
25,467 Arrow heads, Sealey farm, Onondaga tp.  
25,468 Pipe stone beads, (2 native, 13 venetian glass, and 5 imitation of the native catlinite) grave, Walker farm, Onondaga tp.  
25,469 Small breastplate, Walker farm, grave, Onondaga tp.  
25,470 Breastplate of shell, grave, Walker farm, Onondaga tp.  
25,471 Wooden plate, grave, Walker farm, Onondaga tp.  
25,472 Fragments of pottery, Sealey, Purdy, Walker and Book farms.  
25,473 Lead vessel, grave, Walker farm, Onondaga tp.  
25,474 Bone bead, grave, Walker farm, Onondaga tp.  
25,475 Portion of earthen vessel, Sealey farm, Onondaga tp.  
25,476 Remains of other large clay vessels, Sealey farm, Onondaga tp.  
25,477 Skull, grave, Sealey farm, Onondaga tp.  
25,478 Copper vessel, grave, Walker farm, Onondaga tp.  
25,479 Wooden spoon, grave, Walker farm, Onondaga tp.  
25,480 Comb unfinished, Sealey farm, Onondaga tp.  
25,481-4 Combs, graves, Walker farm, Onondaga tp.  
25,485 Bone spoon, grave, Walker farm, Onondaga tp.  
25,486 Grave, Walker farm, Onondaga tp.  
25,487 Arrow points (45), grave, Walker farm, Onondaga tp.  
25,489 Knife, grave, Walker farm, Onondaga tp.  
25,490 Wampum discs united (14), grave, Walker farm, Onondaga tp.  
25,491 Shell ornament, grave, Walker farm, Onondaga tp.

- 25,492 Paint, grave, Walker farm, Onondaga tp.
- 25,493 Spoon, grave, Walker farm, Onondaga tp.
- 25,494-8 Bone needles, Sealey farm, Onondaga tp.
- 25,499 Tally-bone, Sealey farm, Onondaga tp.
- 25,500 Bone awl, Sealey farm, Onondaga tp.
- 25,501 Polished elk tooth, Sealey farm, Onondaga tp.
- 25,502 Turtle shell, drilled, Sealey farm, Onondaga tp.
- 25,503 Deer-horn pipe, Sealey farm, Onondaga tp.
- 25,504 Bone ornament, Sealey farm, Onondaga tp.
- 25,505 Whistle (?) lot 11, 1st range, south of Hamilton and London rd.
- 25,506-7 Breastplates of shell, grave, Walker farm, Onondaga tp.
- 25,508 Colored European beads (74), Walker farm, Onondaga tp.
- 25,509 Wampum (23) purple discs, made from Venus mercenarie, Sealey farm, Onondaga tp.
- 25,510 Arrow straightener (deerhorn), Sealey farm, Onondaga tp.
- 25,511 Deer-horn, Sealey farm, Onondaga tp.
- 25,512 Deer-horn, Walker farm, Onondaga tp.
- 25,513-4 Spears, Sealey farm, Onondaga tp.
- 25,515 Gouge, Sealey farm, Cainsville, Brantford tp.
- 25,516 Stone axe, from farms adjoining Sealey farm, Onondaga tp.
- 25,517 Lower jaw bone, grave, Walker farm, Onondaga tp.
- 25,518 Shell ornament, Sealey farm, Onondaga tp.
- 25,520 Amulet, found in the fields in vicinity of Sealey farm, Onondaga tp.
- 25,521 Fish spear, Sealey farm, Onondaga tp.
- 25,522 Parched corn, Sealey farm, Onondaga tp.
- 25,523 Reducing stone, Sealey farm, Onondaga tp.
- 25,524 Worked clay, Book farm, lot 50, Brantford tp.
- 25,525 Pipe bowl, Sealey farm, Onondaga tp.
- 25,526 Native cloth, grave, Walker farm, Onondaga tp.
- 25,527 Copper man, (sheet copper or brass) lot 11, 1st range, South Hamilton road.
- 25,528 Pipe head, Sealey farm, Onondaga tp.
- 25,529 Image of man's head, Sealey farm, Onondaga tp.
- 25,530 Image head, Sealey farm Onondaga tp.
- 25,531 Copper beads, Sealey farm, Onondaga tp.
- 25,532 Bone, marked, Purdy farm, lot 56, con. 3, Brantford tp.
- 25,533 Peculiar chisel, lot 56, con. 3, Brantford tp.
- 25,534-5 Pipe bowls, Sealey farm, Onondaga tp.
- 25,536 Breast plate, grave, Walker farm, Onondaga tp.
- 25,537 Grooved axe, lot 7, 1st range, south, Hamilton road
- 25,538 Iron bracelet, grave, Walker farm, Onondaga tp.
- 25,539-41 Bracelets, grave, Walker farm. The band bracelet is from Teeple farm, Jerseyville, Ancaster tp.
- 25,542 Deer horn pin, Sealey farm, Onondaga tp.
- 25,543 Copper kettle, grave, Walker farm, Onondaga tp.
- 25,544 Skull, grave, Walker farm, Onondaga tp.
- 25,545 Wampum, graves, Walker farm, Onondaga tp.
- 25,546 Tower pipe, grave, Walker farm, Onondaga tp.
- 25,547 Tower pipe, grave, Walker farm, Onondaga tp.
- 25,548 Copper pipe, grave, Walker farm, Onondaga tp.

- 25,549 Pipe bowl, grave, Walker farm, Onondaga tp.
- 25,550 Pipe, grave, Walker farm, Onondaga tp.
- 25,551 Stone pipe, grave, Walker farm, Onondaga tp.
- 25,552 Pipe, clay, grave, Walker farm, Onondaga tp.
- 25,553 Pipe, grave, Walker farm, Onondaga tp.
- 25,554 Stone pipe, grave, Walker farm, Onondaga tp.
- 25,555 Owl pipe, stone, grave, Walker farm, Onondaga tp.
- 25,556 Common pipe, Sealey farm, Onondaga tp.
- 25,557 Pipe bowls, Sealey farm, Onondaga tp.
- 25,558-66 Pipes, graves, Walker farm, Onondaga tp.
- 25,567 Stone pipe, Sealey farm, Onondaga tp.
- 25,568 Pipe, Teeple farm, grave, Jerseyville, Ancaster tp.
- 25,569 Pipe, grave, Teeple farm, Jerseyville, Ancaster tp.
- 25,570 Pipe, grave, Walker farm, Onondaga tp.
- 25,571 Copper pipe, (sheet) grave, Walker farm, Onondaga tp.
- 25,572-81 Pipes, grave, Walker farm, Onondaga tp.
- 25,582 Bone spoon, grave, Walker farm, Onondaga tp.
- 25,583 Slate ornament, bird amulet, Brantford tp.
- 25,584 Pipe, part broken, grave, Walker farm, lot 10, con. 3 Onondaga tp.
- 25,585 Pipe bowl, Sealey farm, Onondaga tp.
- 25,586 Rim of copper kettle, grave, Walker farm, Onondaga tp.
- 25,587 Specimen of lower jaw-bone, grave, Walker farm, Onondaga tp.
- 25,588 Shell, grave Sealey farm, Onondaga tp.
- 25,589 Pottery marker, Sealey farm, Onondaga tp.
- 25,590 Iron axe, grave, Walker farm, Onondaga tp.
- 25,591 Conch shell, grave, Walker farm, Onondaga tp.
- 25,592 Bone articles, Sealey farm, Onondaga tp.
- 25,593-4 Awls, Purdy farm, lot 56, con. 3, Brantford tp.
- 25,595 Slate ornament, found near Sealey farm, Onondaga tp.
- 25,596 Axe, iron, reduced, Sealey farm, Onondaga tp.
- 25,597 Bracelet, Teeple farm, Jerseyville, Ancaster tp.
- 25,598 Copper ring, grave, Walker farm, Onondaga tp.
- 25,599 Ring, Sealey farm, Onondaga tp.
- 25,600 Spoon, Sealey farm, Onondaga tp.
- 25,601 Spear, Sealey farm, Onondaga tp.
- 25,602 Pendant, grave, Walker farm, Onondaga tp.
- 25,603 Heart-shaped shell, Teeple farm, Jerseyville, Ancaster tp.
- 25,604 Rattle, grave, Walker farm, Onondaga tp.
- 25,605 Rude pipe head, Sealey farm, Onondaga tp.
- 25,606 Unfinished bead, Sealey farm, Onondaga tp. This was found in creek.
- 25,607 Animal skin, perhaps moose, with long hair attached. From a grave, Brant county.
- 25,608 Bone bead, Sealey farm, Onondaga tp.
- 25,609 Arrow point, grave, Walker farm, Onondaga tp.
- 25,610 Smooth stone, Sealey farm, Onondaga tp.
- 25,611 Perforated turtle-shell ornament, Sealey farm, Onondaga tp.
- 25,612-8 Some strings of wampum (shell beads), Walker farm, Onondaga tp.
- 25,619 Two strings of wampum, all discoidal, and of European make (in Albany or Schenectady, N.Y.)



- 25,620 Two discoidal beads, black and of material resembling anthracite coal, Walker farm, Onondaga tp.
- 25,621 String of slender Venetian glass beads, red, and from an inch and a quarter to two inches long. The beads are cylindrical, Walker farm, Onondaga tp.
- 25,622 String of eighteen Venetian glass beads, cylindrical and square in cross section, all red, Walker farm, Onondaga tp.
- 25,623 String of long cylindrical and small globular, blue, (Venetian) glass beads, Walker farm, Onondaga tp.
- 25,624 String of red, cylindrical, Venetian glass beads, Walker farm, Onondaga tp.
- 25,625 String of small red, blue and striped Venetian glass beads, Walker farm, Onondaga tp.
- 25,626 String of short cylindrical wampum, native make, Walker farm, Onondaga tp.
- 25,627-39 Strings of beads, mixed native and European, Walker farm, Onondaga tp.
- 25,640 Twenty-three large bone bead and tally bones.
- 25,641 Thirty-six large bone beads and tally bones.
- 25,642-47 Slate gorgets found in fields in vicinity of Sealey farm, Onondaga tp.
- 25,648-51 Long beads made from the columella of *Busycum perversum*. From a grave on Walker farm, Onondaga tp.
- 25,652-5 Long bone beads, grave, Walker farm, Onondaga tp.
- 25,656-60 Portions of wooden spoons, graves on Walker farm, Onondaga tp.
- 25,661 Wooden spoon, from grave on Walker farm, Onondaga tp.
- 25,662 Perforated piece of turtle shell, Sealey farm, Onondaga tp.
- 25,663-77 Horn pins, Sealey farm, Onondaga tp.
- 25,678 Phalangal bone of deer, ground down on one side, Purdy farm, lot 56, con. 3, Brantford tp.
- 25,679-83 Shell ornaments, from graves on Walker farm, Onondaga tp.
- 25,684 Copper wire spiral ornament, Sealey farm, Onondaga tp.
- 25,685 Combined drill and scraper, grave on Walker farm, Onondaga tp.
- 25,686 Scraper, grave on Walker farm, Onondaga tp.
- 25,687-703 War points, grave on Walker farm, Onondaga tp.
- 25,704-713 Bone awls, Walker farm, Onondaga tp.
- 25,714 String of beads (12) made from vertebræ of a large fish, Sealey farm, Onondaga tp.
- 25,715 Beads still attached to original string, Walker farm, Onondaga tp.
- 25,716 Stone pipe, from a grave on Sealey farm, Onondaga tp.
- 25,717-23 Three chert arrowheads, piece of copper, iron knife, iron chisel and awl. All from a grave on Sealey farm, Onondaga tp.
- 25,724 Pipe bowl, Sealey farm, Onondaga tp.
- 25,725 Fragment of what appears to have been a pipe bowl, rectangular in cross section, Brant co.
- 25,726-50 Pottery fragments, various places in Brant co.
- 25,751 Portion of a large clay vessel, Sealey farm, Onondaga tp.
- 25,752-57 Worked deer horns, Brantford, Onondaga tp.

- 25,758-849 Flints, various places in Brant co.  
 25,850-60 Bone awls, etc., various places in Brant co.  
 25,861 Awl, made from the bill of a large bird, Brant co.  
 25,862-69 Fragments of plastron of a turtle, (sp.?) Brant co.  
 25,870-72 Pipe bowls, Sealey farm, Onondaga tp.  
 25,873-81 Pipe bowls, Brant co.  
 25,882 Worked pottery clay, Brook farm.  
 25,883-86 Bone needles, Brant co.  
 25,887-88 Iron awls, grave on Walker farm, Onondaga tp.  
 25,889-906 Celts and adzes, various places in Brant co.  
 25,907 Iron axe, Brant co., grave on Walker farm, Onondaga tp.  
 25,908 Iron axe, Brant co.  
 25,909 Shell of *Busycum perversum*, Walker farm, Onondaga tp.  
 25,910 Part of what appears to have been a crucible, which might have been used by the early French traders or missionaries.  
 25,911-12 Unio shells, Brant co., from graves.  
 25,913 Shell beads, (31) Sealey farm, Onondaga tp.  
 25,914-17 Four catlinite beads, native make, Sealey farm, Onondaga tp.  
 25,918 Eighty-five European glass beads, Sealey farm, Onondaga tp.  
 25,919-26,084 Wampum made by Europeans, Sealey farm, Onondaga tp.  
 26,085 Iron knife, Walker farm, Onondaga tp.
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- 26,086 Soapstone pipe, Lot 15, con. 5, Eldon tp. N. Victoria. Plowed up thirty-seven years ago by the late Mr. Torrie. G. E. Laidlaw.  
 26,087 Animal head probably from bowl of pipe, lot 23, con. 1, site 24, Brown's, Fenelon tp. G. E. Laidlaw.  
 26,088 Clay pipe, Lot 23, con. 1, site 24, Brown's, Fenelon tp. G. E. Laidlaw.  
 26,089 Bead made from clay pipe stem, lot 23, con. 1, site 24, Brown's, Fenelon township.  
 26,090 Animal foot-bone, gambling, lot 23, con. 1, site 24, Brown's, Fenelon tp.  
 26,091-9 Clay discs used for gambling purposes, lot 23, con. 1, site 24, Brown's, Fenelon tp.  
 26,100 Bone needles, lot 23, con. 1, site 24, Brown's, Fenelon tp.  
 26,102 Bone beads, lot 23, con. 1, site 24, Brown's, Fenelon tp.  
 26,107 Skull (Indian) Grave, township of Blanshard. W. J. Wintemberg.  
 26,108 Copper axe, found by Mr. Corey H. Redden, on lot 33, con. 2, township of Ernesttown, Lennox county. H. S. Davy, Odessa.  
 26,109 Bone bead. This article may be taken as an evidence that bone beads were dyed by the Indians, and that one method of so-doing was by winding fibrous material round the bone spirally before dipping the specimen into liquid coloring matter.  
 26,110 Arrowhead of argillite, Dominica, West Indies. Very Rev. Dean, W. R. Harris, D.D.  
 26,111 Skull of buffalo bull collected by Mr. Nash, Lethbridge Alberta. Presented by O. E. Windsor, Lethbridge.  
 26,112 Skull of buffalo cow, collected by Mr. Nash, Lethbridge. Presented by O. E. Windsor, Lethbridge, Alta.

From 26,113 to 26,170, presented by Fred Birch, Wodehouse.

- 26,113-26,137 Twenty-five flints from various places in Ontario.
- 26,138 Stone adze, lot 9, con. 6, Euphrasia, Grey county.
- 26,139 Stone adze, Maple, Vaughan tp., York county.
- 26,140 Slate axe or chisel eight inches long, one and three-quarter inches wide, and three-quarters inch thick, Vandeleur, Grey county.
- 26,141 Small axe (short and thick) Maple, Vaughan, York county.
- 26,142 Small and well formed stone axe, Maple, Ont.
- 26,143 Stone adze (roughly quadrangular in cross section), Maple, Vaughan tp.
- 26,144 Roughly made stone axe or chisel, slight pits or hollows on one side.
- 26,145 Stone axe, Valley of Beaver river, Euphrasia, Grey county.
- 26,146 Stone axe, well formed, Chinguacousy, Peel county, Ont.
- 26,147 Stone axe, found at Maple, Vaughan tp., county of York.
- 26,148 Stone adze (very large) found on lot 16, con. 3, Euphrasia.
- 26,149 Stone axe (broken) found at Maple, Vaughan tp., York county.
- 26,150 Stone axe, found at Maple, Vaughan tp., York county, Ont.
- 26,151 Slate gouge of Huronian slate (somewhat rare material for this purpose) and from a more northerly locality than any other tool of this kind in the museum. Clarksburg, Collingwood tp.
- 26,152 Stone chisel, found at Chinguacousy, Peel county, Ont.
- 26,153-4 Two small stone axes, Grey county.
- 26,155 Bar amulet-degraded. This specimen (of Huronian slate) seems to have fallen into the hands of someone who has spoiled the end holes and begun to make others along the base. From near Coleraine, Vaughan tp., York county.
- 26,156 Roughly chipped axe of Huronian slate. Only the edge ground or polished, lot 7, con. 7, Euphrasia, Grey county.
- 26,157 Very thin slate cutting tool, probably a salmon knife. From Ladner's Landing, British Columbia.
- 26,158 Spindle-whorl or perforated disc. From Whitchurch, York county.
- 26,159 Fragment of pottery, Clarksburg, Collingwood tp., Grey county.
- 26,160 Fragment of pottery, Clarksburg, Collingwood tp., Grey county.
- 26,161 Wampum. From ossuary at Kleinburg, Vaughan tp. With these were found three hundred skulls, and four or five copper kettles.
- 26,162 Clay pipe bowl. From Clarksburg, Collingwood tp., Grey county.
- 26,163 Clay pipe bowl. From Clarksburg, Collingwood tp., Grey county.
- 26,164 Very tiny clay pipe bowl, one half-inch long, and one-half inch wide. Probably a child's toy. From near the old fort, Midland, Ont.
- 26,165 Clay pipe bowl, found near the old fort, Midland, Ont.
- 26,166 Arrowhead (well shaped, but imperfect) lot 5, con. 6, Euphrasia, Grey county.

- 26,167-8 Two scrapers found at mouth of the Humber river, near Toronto.
- 26,169 Arrowhead of argillite. Ladner's Landing, British Columbia.
- 26,170 Arrowhead well shaped, lot 17, con. 7, Euphrasia, Grey county.
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- 26,171 Four stone, nine shell, two bone, and eight glass beads, Mitchell farm, Brant county, John Clark, Onondaga. Dr. A. Hamilton, Toronto.
- 26,172-9 Eight roughly chipped chert pieces, having an extremely paleolithic appearance. These are part of a cache found on the farm of Wm. Charlton, near Ilderton, London tp. Rev. C. Barltrop.
- 26,180 Half of a very fine gorget found on lot 7, con. 7, Euphrasia tp., Grey county. Fred Birch.
- 26,181 Unfinished slate gorget, north half lot 15, con. 12, Blenheim tp. A. Hall, per W. J. Wintenberg.
- 26,182-3 Pottery fragments bearing curved lines, near Otterville, Norwich tp. W. J. Wintenberg.
- 26,184 Pendant bearing incised pictographs. Lot 8, Beasley's New Survey, Waterloo county. H. Z. Smith, per W. J. Wintenberg.
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From 26,185-26,247 Presented by Fred Storry, Smithdale, Ont.

- 26,185-99 Fragments and cuttings of large shell, lot 12, con 7, Nottawasaga.
- 26,200 Eighteen shell beads, lot 12, con. 7, Nottawasaga.
- 26,201-2 Bear's teeth. Lot 12, con. 7, Nottawasaga.
- 26,203 Wolf's teeth. Lot 12, con. 7, Nottawasaga.
- 26,204 Left side upper tooth of beaver. Lot 12, con. 7, Nottawasaga.
- 26,205 Unfinished stone pipe head, of black limestone, in which are numerous small corals. Lot 12, con. 7, Nottawasaga.
- 26,206 Fragment of limestone pipe bowl, on which is carved a form, probably representing a lizard. Lot 12, con. 7, Nottawasaga.
- 26,207 Limestone pipe, somewhat imperfect. Lot 12, con. 7, Nottawasaga.
- 26,208 Stone pipe, carved to represent a human head and arms; the head projecting from the rim. The stem is broken and a new hole is bored in base for the insertion of another stem. Lot 12, con. 7, Nottawasaga.
- 26,209-12 Fragments of stone pipe stems. 26,209 is of soap-stone. 26,210 is of heavy spar. The other two are of limestone. Lot 12, con. 7, Nottawasaga.
- 26,213-18 Clay pipe bowls somewhat imperfect. 26,217 is formed to represent an upturned face, the open mouth of which forms the bowl. It resembles 6,864 in our collection from the same locality. Lot 12, con. 7, Nottawasaga.
- 26,219 Clay, human head from bowl of pipe. Lot 12, con. 7, Nottawasaga.
- 26,220 An unusually formed portion of what was probably a clay pipe stem. Lot 12, con. 7, Nottawasaga.

- 26,221 30 Clay pipe stems. Lot 12, con. 7, Nottawasaga.  
 26,231-39 Stone beads (red stone). Lot 12, con. 7, Nottawasaga.  
 26,240-41 Long stone beads. Lot 12, con. 7, Nottawasaga.  
 26,242 Fragment in dark red stone of what seems to have been an animal form. Lot 12, con. 7, Nottawasaga.  
 26,243 Stone disc, two inches in diameter, and three-sixteenths of an inch thick. Lot 12, con. 7, Nottawasaga.  
 26,244 Very elegantly and ingeniously formed bone harpoon, six inches long, with four barbs. Lot 12, con. 7, Nottawasaga.  
 26,245 Small red stone pendant; once much longer; somewhat turtle like. Lot 12, con. 7, Nottawasaga.  
 26,246 Twelve European glass beads from an Indian village site. Lot 12, con. 7, Nottawasaga.  
 26,247 Iron tomahawk in good condition, each side marked with three impressions of a stamp like 10.

- 26,248 A small and somewhat modern looking black stone pipe. Kamloops, British Columbia. W. C. Perry, Winnipeg.  
 26,249 Isa-dunk'wa, used by Onondaga Indians to stretch muskrat hides. It is made of witch hazel (oo-eh-nah-kwen-ha'he). Some are made of arbor vitae or white cedar (oo-soo-ha'tah). The ends are fastened with a strip of the inner bark of the basswood (ho-ho'sa), and the hide was fastened at the bottom with a strip of the same material. W. J. Wintemberg.

- 26,250 Short, crooked knife, iron blade and ivory handle. Herschel Island, Eskimo. Rev. I. O. Stringer.  
 26,251 Large bone spearhead, without blade, Eskimo, Herschel Island. Rev. I. O. Stringer.  
 26,252 Eskimo eye shade. Herschel Island. Rev. I. O. Stringer.  
 26,253 Lock fish-hook, used by Loucheux Indians of Fort McPherson. Rev. I. O. Stringer.  
 26,254 Eskimo throwing stick. Herschel Island, mouth of Mackenzie river. Rev. I. O. Stringer.  
 26,255 Undetermined. Herschel Island, mouth of Mackenzie river. Rev. I. O. Stringer.  
 26,256 Eskimo (Noonatagmiot tribe) spear, from Arctic coast, used in killing whales, seals, deer, moose, and other animals when swimming in rivers or lakes. Rev. I. O. Stringer.  
 26,257 Eskimo oomiak, or woman's boat model, Herschel Island, mouth of Mackenzie river. Rev. I. O. Stringer.  
 26,258 Eskimo kayak (model), Herschel Island, mouth of Mackenzie river. Rev. I. O. Stringer.

- 26,259 Purse of East Indian nurse (ayah). David Boyle.  
 26,260-65 Bone heads. British Columbia. Cary W. Hartman.

- 26,266 to 26,345 presented by Dr. T. W. Beeman.  
 26,266 Very fine gouge, Baptiste Lake. J. Tysick, per Dr. T. W. Beeman.

- 26,267 Unfinished axe, Mississippi Lake. A. McCoy, per Dr. T. W. Beeman.
- 26,268 Gouge, lot 8. con. 1, Bathurst tp., Lanark co. G. Ritchie, per T. W. Beeman.
- 26,269 Quartzite arrowhead, Talon Lake, Lanark co. Geo. Hone, per Dr. T. W. Beeman.
- 26,270 Brownish colored chert knife, lot 14, con. 5, Lanark tp., Lanark co. J. W. Borrowman, per Dr. T. W. Beeman.
- 26,271 Chert knife, Lanark Co. Geo. Ritchie, per Dr. T. W. Beeman.
- 26,272 Leaf-shaped chert object, lot 4, con. 7, Drummond tp., Lanark Co. J. W. McIntyre, per Dr. T. W. Beeman.
- 26,273 Chert knife, lot 26, con. 7, North Burgess tp. P. Bennet, per Dr. T. W. Beeman.
- 26,274 Chert knife or scraper, North Burgess tp. P. Bennet, per Dr. T. W. Beeman.
- 26,275 Black chert knife, lot 19, con. 9, Drummond tp., Lanark Co. Dan McKeown, per Dr. T. W. Beeman.
- 26,276 Arrowhead, Lake Rideau. Ernest Jamieson, per Dr. T. W. Beeman.
- 26,277 Arrowhead, Jones Falls, Lanark Co. Dr. T. W. Beeman.
- 26,278 Quartzite arrowhead, lot 13, con. 10, N. Elmsley tp., Lanark Co. Wm. Gilchrist, per Dr. T. W. Beeman.
- 26,279 Flint scraper, Talon Lake. Geo. Hone, per Dr. T. W. Beeman.
- 26,280 Slate chisel, Talon Lake. Geo. Hone, per Dr. T. W. Beeman.
- 26,281 Arrowhead, lot 25, con. 6, Fullerton tp. John Butters, per Dr. T. W. Beeman.
- 26,282 Soapstone pipe, Rideau Lake. Geo. Hone, per Dr. T. W. Beeman.
- 26,283 Part of slate implement, lot 25, con. 10, Bathurst Tp, Lanark Co. Chas. McKay, per Dr. T. W. Beeman.
- 27,284-98 Chert and quartz arrowheads, etc., Rideau Lake. Dr. T. W. Beeman.
- 26,299. Arrowhead, peculiar form, Rideau Lake. Dr. T. W. Beeman.
- 26,300. Rough unfinished stone axe, Rideau Lake. Dr. T. W. Beeman.
- 26,301-2. Two small celts, Rideau Lake. Dr. T. W. Beeman.
- 26,303. Very fine adze, Rideau Lake. Dr. T. W. Beeman.
- 26,304-6. Fragments of clay pipe bowls, Rideau Lake. Dr. T. W. Beeman.
- 26,307. Pottery fragment, Rideau Lake. Dr. T. W. Beeman.
- 26,308-9. Bone awls, Rideau Lake. Dr. T. W. Beeman.
- 26,310. Bone pin, Rideau Lake. Dr. T. W. Beeman.
- 26,311. Bone, sawed in preparation for making beads, Rideau Lake. Dr. T. W. Beeman.
- 26,312. Bone tube, Rideau Lake. Dr. T. W. Beeman.
- 26,313. Scraper made of quartz, Rideau Lake. Dr. T. W. Beeman.
- 26,314. Fragment of stone pipe, Rideau Lake. Dr. T. W. Beeman.
- 26,315. Fragment of stone gouge, Rideau Lake. Dr. T. W. Beeman.
- 26,316. Small stone celt, Rideau Lake. Dr. T. W. Beeman.
- 26,317. Fragment of stone implement, Rideau Lake. Dr. T. W. Beeman.
- 26,318. Stone implement, Rideau Lake, Dr. T. W. Beeman.
- 26,319-21. Stone implements, Rideau Lake. Dr. T. W. Beeman.

26,322-45. Pottery fragments, Rideau Lake. Dr. T. W. Beeman.

26,346. Chert drill, Illinois. David Boyle

26,347-513. Arrowheads, Southern Indiana. David Boyle.

26,314-16. Perforators, Southern Indiana. David Boyle

26,517-24. Scrapers, Logan county, Central Illinois. David Boyle.

26,525. Fragment of pipe bowl, Central Illinois. David Boyle.

26,526-30. Four adzes and one gouge near Midland. David Boyle.

26,531-35. Prehistoric pottery from cliff dwellings near Baker's Butte, Yavapai County, Arizona. J. W. Benham, Phoenix, Arizona.

26,536. Bone and iron arrowhead spliced. David Boyle.

26,540. Skull (Indian) lot 4, con. 2, Edwardsburg, Ont. Rufus Froom, Cardinal, Ont.

26,541-43. Leg bones (Indian) lot 4, con. 2, Edwardsburg, Ont. Rufus Froom, Cardinal, Ont.

26,544. Roughly blocked out animal form in Huronian slate, probably intended for a pipe. Somewhat resembling 11,103 but possessing a better finish. Its greatest height is six and three quarter inches, breadth three and a half, and thickness one and three-eighths. It was found on the farm of Mr. Leith, in the township of Binbrook, South Wentworth; by exchange from Mr. Cary W. Hartman, Cincinnati, O.

26,545. Skull, perforated with six holes, Wormian bones, no under jaw. Dr. J. E. Brown, Arkona, Ont.

26,546. Skull, perforated with three holes. Imperfect. Of person probably eighty years of age. Dr. J. E. Brown, Arkona, Ont.

26,547. Skull. Dr. J. E. Brown, Arkona, Ont.

26,548. Skull. Imperfect lower face, under jaw missing, Wormian bones on right side of occipital suture. Dr. J. E. Brown, Arkona, Ont.

26,549. Frontal bone of child's skull. Dr. J. E. Brown, Arkona, Ont.

26,550. Shoulder blade, vertebræ, and six arm and leg bones from the grave where the skulls were found. Dr. J. E. Brown, Arkona.

26,551. Musical instrument, eight bamboo tongues mounted on an ornamented burnt-wood box  $11 \times 3\frac{1}{2}$  in. and  $1\frac{1}{2}$  in. deep, Kroo Coast, W. Africa. Dr. James F. Boyle, Toronto.

26,552. Money pouch, ornamented leather. Procured from a native's person, off Gold Coast, W. Africa. Dr. Jas. F. Boyle

26,553. Ju-ju or fetish. Carried by natives on going to war in Southern Nigeria, Bight of Benin, Africa. It is worn suspended around the loins for luck. "White men's bullets no good—no live, when we wear this." Dr. Jas. F. Boyle, Toronto.

26,554. Fragment of pottery, plain, reticulated pattern, Dead river bank, surface find, Volusia, Florida U.S.A. R. J. Bonner, B.A., De Land, Fla.

26,555-60. Flint and jasper chips from implements. 26,558. Is a

- beautiful chip of silicified coral. Volusia County. R. J. Bonner, B.A., De Land, Fla., U.S.A.
- 26,561-72. Arrows of chert, jasper and chalcedony (surface find). Volusia County, Fla. R. J. Bonner, B.A., De Land, Fla. U.S.A.
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- 26,573. Large, well-made, and slightly grooved stone axe, lot 7, con. 13, North Orillia. Amos Rogers, Washago.
- 26,574. Plain, and much-weathered stone axe. Has the appearance of being unusually old. lot 7, con. 13, North Orillia. Amos Rogers, Washago.
- 26,575. Small, flat and somewhat rudely made stone axe. J. Sandow, per W. H. Elliott, B.A., Toronto.
- 26,576. Egg-shaped, water-worn stone, from village site, Clarksburg. May have been used as a club head, but shows no sign of workmanship. Frederick Birch, Wodehouse.
- 26,577. Gorget or tablet, broken. Remaining hole is unusually large—nearly three-eighth inches in diameter, flaring to five-eighth inches on one side. Mr. Samuel Wiley, lot 7, con. 7, Euphrasia, per F. Birch, Wodehouse, Ont.
- 26,578. Gorget or amulet (two holes), from village site near Clarksburg. Frederick Birch, Wodehouse. This somewhat remarkable specimen is simply a water-worn stone, the almost perfect symmetry of which has attracted the attention of some Indian who bored the holes through it. Frederick Birch, Wodehouse, Ont.
- 26,579. Left half of an ox-shoe, Mud Turtle Lake. Frederick Birch, Wodehouse, Ont.
- 26,580. Chert arrowhead, unbarbed, with long neck, Tamworth, Addington county. Rev. W. H. Adams.
- 26,581. Bone awl or needle, from near Clarksburg, Ont. Frederick Birch, Wodehouse, Ont.
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- 26,582. Unfinished soapstone pipe, slightly curved, from shore of Dalhousie Lake, Lanark county. Dr. Beeman, Perth, Ont.
- 26,583. Rubbing-stone, found on the shore, of Dalhousie Lake, Dalhousie township, Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,584. Probably the portion of a stem of a pipe known as the platform pipe, an unusual form in Ontario, Dalhousie Lake, Dalhousie township, Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,585. Rubbing-stone, in which some round object has been smoothed or polished, Dalhousie Lake, Dalhousie township, Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,586. Woman's slate knife (semi lunar). Dalhousie township, Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,587. Part of a gorget with two holes, Dalhousie township, Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,588. Slate knife (arrow-head shaped), Dalhousie township, Lanark County, Dr. T. W. Beeman, Perth, Ont.
- 26,590-1 Small lance-shaped specimen commonly known as a pottery marker. Dr. Beeman, Perth, Ont.



- 26,592 Piece of soapstone cut and broken from a larger portion showing the method of separation, Dalhousie Lake, Dalhousie tp., Lanark County, Ont. Dr. T. W. Beeman, Perth, Ont.
- 26,593 Small and well made stone axe or chisel, Dalhousie Lake, Dalhousie tp., Lanark County. Dr. T. W. Beeman, Perth, Ont.
- 26,594. Stone axe found on the shore of Dalhousie Lake, Dalhousie, tp., Lanark County. Dr. T. W. Beeman, Perth, Ont.
- 26,595. Small axe of felsite, sharpened at both ends, roughly made but well polished, shore of Dalhousie Lake, Dalhousie tp., Lanark County. Dr. T. W. Beeman, Perth, Ont.
- 26,596. Small gouge, only slightly hollowed, Dalhousie Lake, Dalhousie tp., Lanark County. Dr. T. W. Beeman, Perth, Ont.
- 26,597. Small stone axe, Dalhousie Lake, Dalhousie tp., Lanark County. Dr. T. W. Beeman, Perth, Ont.
- 26,598 Small stone chisel, four inches long, tapering rapidly to the head, Dalhousie lake, Dalhousie tp., Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,599. Very small and somewhat roughly made chisel. Specimens of this kind may have been fastened to the heads of clubs, Dalhousie lake, Dalhousie tp., Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,600. Clay pipe head with four deeply sunk depressions around the bowl. Dr. Beeman, Perth, Ont.
- 26,601. Piece of clay pipe stem, Dalhousie lake, Dalhousie tp., Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,602-31. Arrowheads of chert and quartzite, various sizes and shapes, from Dalhousie lake, Dalhousie tp., Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,632-33. Two scrapers, found on the shore of Lake Dalhousie, Dalhousie tp., Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,634-59. Fragments of pottery bearing characteristic patterns, belonging to eastern Ontario, Dalhousie lake, Dalhousie tp., Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,660. Fragment of pottery very peculiarly marked, shore of Dalhousie lake, Dalhousie tp., Lanark county, Dr. T. W. Beeman.
- 26,661. Roughly chipped specimen of felsite, probably a reject. Found on shore of Dalhousie lake, Dalhousie tp., Lanark county. Dr. T. W. Beeman.
- 26,662. Small well made slate gouge, hollowed its whole length, the opposite side having an unusually large angular appearance, with a high ridge. Dalhousie lake, Dalhousie tp., Lanark county. Dr. T. W. Beeman, Perth, Ont.
- 26,663. A fragment five inches in length of what has been an extremely large and well finished slate knife, although only a quarter of an inch thick in the middle; at the fracture, where it is one and three-eighth inches wide, a distinct central ridge extends from end to end; shore of Dalhousie Lake, Dalhousie township, Lanark county, Ont. Dr. Beeman, Perth, Ont.
- 26,664. Small steatite pipe, two inches long, almost straight, bowl very thin, workmanship good, shore of Dalhousie Lake Dalhousie township, Lanark county, Ont. Dr. Beeman, Perth Ont.

- 26,665. Skull of native woman, Queensland, Australia. Collected by Mr. G. Scovell, Toronto. This specimen bears several marks of blows received while the person was alive.
- 26,666. Pipe head, stone, stem broken. North West Territory. David Boyle, Toronto.
- 26,667. Small clay vessel from ruined city in Butler Wash., Utah. Collected by Don. McGuire, Ogden City, Utah. David Boyle, Toronto.
- 26,668. Pendant or gorget of mottled slate; one hole. Mr. Alfred Willson, C.E., Toronto.
- 26,669. Spearhead or very large arrowhead of black chert, broken front, Grand River, Pilkington township. David Boyle, Toronto, Ont.
- 26,670-76. Six small flints from Northstoke, Oxfordshire, Eng. David Boyle, Toronto.
- 26,677. Flint scraper, Thames Valley, England. David Boyle, Toronto.
- 26,678-9. Two large flint flakes. may have been used as scrapers, Thames Valley, Oxfordshire, England. David Boyle, Toronto.
- 26,620. Large flint flake bleached, Bignor Hill, Sussex, England. David Boyle, Toronto.
- 26,621-90. Worked specimens of flint, Surrey, Hill, Eng. David Boyle, Toronto.
- 26,691-2. Paleoliths, Wandsworth Drift, Thames Valley, Eng. David Boyle.
- 26,693-4. Flint flakes, Ightham, England. David Boyle, Toronto.
- 26,695. Oval paleolith, Bois de Rocher, St. Helens, Cotes du Nova, France. David Boyle, Toronto.
- 26,696. Stone pipe, has originally had a human figure carved on the front side of the pipe, with the head looking towards the smoker. The head is now broken off and the edge has been rubbed down smoothly. From near the Southwold earthwork, Elgin county, Ont. David Boyle, Toronto.
- 26,697. Stone pipe, probably limestone, quadrangular in cross-section, lower end pointed, upper edge ornamented with two projecting bands. Upper edge notched in middle of each side. Near Southwold earthwork, Elgin county. David Boyle, Toronto.
- 26,698. Clay pipe bowl, Vaughan township, York county, Ont. David Boyle, Toronto.
- 26,699. Hudson River shale pebble, one and three eighth inches long, one inch wide, and one half inch thick, rudely carved to represent a human head. what may have been the suspension hole is bored in the place of the mouth. Richmond Hill, York county, Ont. David Boyle.
- 26,700-1. Two bone needles or awls, Lansing, York township, York county. David Boyle, Toronto.
- 26,702-6. Five flints, Waterloo township, Waterloo county. David Boyle, Toronto.
- 26,707-11. Small stone chisels, York township, York county. David Boyle, Toronto.
- 26,712. Piece of soapstone, probably intended to be a pipe stem. On three sides of the specimen are the beginnings of drillings

- probably made with a wooden drill, Rideau Lake, Lanark county.  
David Boyle.
- 26,713. Flint or chert drills, near Aurora, Indiana. David Boyle, Toronto.
- 26,715. Lance-shaped spear or arrowhead, nearly four inches long, near Aurora, Indiana. David Boyle, Toronto.
- 26,716. Lance-shaped spear or arrowhead, near Aurora, Indiana. David Boyle, Toronto.
- 26,717-8. Two arrowheads with serrated edges, near Aurora, Indiana. David Boyle, Toronto.
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- 26,719. Skull (calvarium) and imperfect underjaw, lot 14, con. 6, Whitchurch, York county. George Nelson, Toronto.
- 26,720. Stone axe, lot 14, con. 6, Whitchurch tp., York county. George Nelson, Toronto.
- 26,731-2. Fragments of pottery, lot 14, con. 6, Whitchurch tp, York county. Geo. Nelson, Toronto.
- 26,733. Woman's waist cloth of native grass, in alternate, longitudinal, plain, stripes of red and pale yellow, Guinea Coast, Africa. David Boyle, Toronto.
- 26,734. Four gambling sticks, probably Athabaskan (N.W.T.), David Boyle, Toronto.
- 26,735. Two gambling sticks, probably north-western. David Boyle, Toronto.
- 26,736-7. Two desiccated, or mummified bodies from British Columbia. J. A. Coates, Victoria, British Columbia.
- 26,738. Skeleton, (disjointed) of what was a mummified body, from British Columbia. J. A. Coates, Victoria, B. C.
- 26,739-53. Fifteen flints from Logan county, central Illinois, U. S. Most of these are very well made, and vary in size from an inch and a half to five and a half inches in length. David Boyle, Toronto.

## WHO MADE THE EFFIGY STONE PIPES?

All the people are not yet dead who are gullible enough, or ignorant enough to believe that iron tomahawks, brass pots, silver ornaments, glass beads, and numerous other articles of European origin were made by the Indians before white men appeared on the continent. When certain beliefs were current, attributing to our "natives," Jewish, Irish, Welsh, Phœnician, Egyptian and Mongolian ancestries there was something like a method in the madness of the theorists. but now-a-days we have, or rather, some of us have, adopted views calculated to make it appear that although there may be nothing in the extraneous-origin theory, yet the Indians belonging to this part of America were indebted to European influence for inspiration affecting some very simple devices.

It has recently been asserted with an attempt to show proof, that all our Indian smoking-pipe forms, except the straight one, are of European origin; or, to put it in another way, that to the influence of European contact is attributable all the forms in question, as well as the effigy styles of ornamentation. This is equivalent to the contention that those who had sense enough to contrive the simplest form of device, viz.,—a straight tube, for the consumption of tobacco, were so utterly devoid of ingenuity, or of adaptability, or of taste, as to be unable to take another step—such a step, for example, as would be necessary in the case of a piece of stone, which, not being perfectly straight, would require the boring of a hole from each end to meet at the angle or curve. However slight any variation of this kind might have been, it would be sufficient to originate the notion of two holes meeting at any angle, and thus, in process of time, to suggest a bowl and stem at right angles to each other.

But there was another way by means of which a modification of this kind could have been brought about. A bit of stone may have been very desirable for the bowl of a pipe, but lacking material to form a long enough stem, or, indeed, any stem at all. Here, then, the savage's knowledge of woodcraft would stand him in good stead, and it would not demand very great inventive genius to think of boring a hole in the side of the bowl to receive a twig of alder, or other wood from which the pith had been removed. We have numerous examples of both very short-stemmed, and of stemless stone pipes, or pipe-bowls, in our museum cases. In one instance the perforation is at the base of the bowl and almost in line with it, but most of the stemless examples are bored at right angles. In the oldest forms of short-stemmed specimens, the bowls and stems form angles more or less obtuse, while in those that are of unmistakably recent origin they are at right angles, or, nearly so.

This is not by any means an attempt to show the evolution of the typical form of pipe from the cigar holder through the straight stone tube, but is merely to emphasize a statement of the belief that without any European influence, and long before there was any on this continent, the aborigines were capable of producing, and did produce, a multiplicity of shapes and "conceits" in this line of work.

If, to what has already been said, we add that smoking has probably always possessed some ceremonial or worshipful significance to many American peoples, we have a very powerful argument favoring the independent modification and ornamentation of pipes.

Nothing, however, can be clearer to even a beginner in the study of American archæology than that a very large number of tobacco pipes owe much, if not everything, to British, French, Spanish and Dutch contact with the Indians. Sometimes this shows itself in the shape alone, but quite as frequently in connection with the character of the workmanship, and the style of ornamentation.

It is but fair to state that in what I regard as the very oldest graves I have seen opened there were no pipes of any kind. At first sight this seems to favor the view that pipes were not in use among the Indians at the time the ancient interments were made, but this conclusion would be too sweeping, for, although those who made the graves in question may have adopted the smoking habit, it may not have been their custom to put pipes in graves at burial times. In any event, it would be quite as logical to affirm that the absence of flints and celts from graves in Ontario, indicates that the people, whose graves these are, were not possessed of such weapons or tools.\*

That a good many pipes evidence European influence would seem to be regarded as conclusive that *all pipes of common form so originated*, but this is absurd. The shape having developed from the straight to the angular form, thus reached its highest possible development in a general way, but in matter of outline and of ornamentation the possibilities were illimitable, and why deny to our Indian the ability to produce more than simple and unadorned objects of this kind? We know that he was extremely fond of personal decoration, and no portion of his outfit was dearer to him than his pipe was.

It might not be easy to affirm whether clay or stone pipes had precedence as an invention, but in either case people who had skill and taste enough to produce a vessel of pottery decorated with pigments, or with incised lines, or to make what we designate as bird-amulets, and various other forms of so-called "ceremonial" objects, may safely be credited with sufficient sense and taste not only to vary pipe forms, but to adorn them. It would, therefore, appear much more reasonable to assume that the Indians had exemplified their art and craft in this way, perhaps, for many centuries before the Discovery; that numerous examples of such workmanship found their way to Europe as curiosities; that in course of time, when smoking became the vogue, Indian art was imitated and improved upon, and that when the white man's pipes, imitating those of the aborigines, casually found their way to America, the Indians, wholly oblivious to their own priority in this line, adopted many hints. We may go even further and take it for granted that not a few stone pipes were

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\*These are very seldom found associated with human remains, yet they must have been in very common use. A remarkable find of "flints" (all very large) was made in a burial mound on Tidd's Island, opposite Gananoque, by Mr. C. A. See, in 1887. These are now in the Provincial Museum, having been kindly presented by Mr. See. A similar find was made in a grave on Wolfe Island. These, too, are in the museum. In both cases, and in those of the Rice Lake mounds, already referred to as being among the oldest graves I have seen opened, copper beads and other articles of this metal were found.

manufactured in the Old World for trading purposes in the New.\* It is, of course, undoubted that many white men, on this continent, either for amusement or for profit, made stone pipes, and it may quite readily be admitted that whenever it was within his power, the Indian would adopt the European methods of working, and, if possible, with European tools, but this is a totally different thing from asserting that until the advent of the white man there was no variety in the native pipe-form; and, therefore, there could be no attempt to adorn what did not exist. Just here, it may be asked, why so little is said with respect to clay pipes in this discussion? Why should not the very same arguments apply to them in a large measure? Were all American clay pipes quite straight until the unintelligent native happened to see a curved, or a right-angled specimen in the hands of a paleface? Among upwards of five hundred clay pipes in the Ontario Provincial Museum, less than two *per cent.* can, by any stretch of imagination, be regarded as bearing any resemblance to the oldest forms of English and French pipes as we may see such in collections, and we have only one at all likely to suggest a straight ancestry. It is three and a half inches long, very rudely made, covered with sharply incised lines at right angles, and is so slightly curved that on the concave side the middle is less than one-fourth of an inch lower than the ends. Of course, the convex side shows considerably more curve—fully half an inch—but the general appearance is that of straightness.

On not one of the small percentage of European-looking pipes is there any kind of ornamentation beyond three, or sometimes, four parallel lines traced round the top of the bowl, while a few are absolutely plain; and this is true, too, respecting the pipes that have more or less flared lips—the so-called cornet or trumpet specimens, which are also, on not very tenable grounds, claimed by reversionists, to owe their peculiar shape to an aboriginal idea suggested by the sight of some brass wind-instrument, or from the imitation of a pipe modelled similarly, as the result of a brilliant conception on the part of some white man, just as if no such flare had ever been produced by Indian women many thousands of times in the making of pottery vessels for domestic use, we cannot even venture to guess how long, before 1492. We may not have to wait a great while until some knowing—some very knowing—archæologist makes the announcement that clay pots of all kinds were totally unknown before the days of the Niña, and the Pinta, and the Santa Maria, the cooks of which caravels first inspired the natives potterywards by exhibiting to them the iron and copper utensils in their respective galleys, for who could be foolish enough to suppose that a savage would ever evolve such notions of æstheticism as are exemplified, not only in the fashioning of such graceful forms as we sometimes find, but in the decoration of them by means of incised or colored designs; imitations of human and other heads, and purely ornamental lip crenations and

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\* It is somewhat remarkable that notwithstanding the imputed European influence, we never find any effigy pipes of Old World material among objects that are clearly of British, French, or Dutch origin. Was it only in America that the European produced pipes of this kind?

projections; to say not a word about such pre-eminently European ideas as are embodied in occasionally supplying these vessels with loop-lugs?

Fortunately for the intellectual reputation of the Indian, through his woman-kind, the art of making pottery was probably the first native industry to fall into complete disuse in this part of America, on account of the immense number of brass vessels that were introduced by white adventurers during the early years of the exploratory and fur-trading periods, and although it is not at all improbable that some aboriginal pottery was produced in remote parts of the country subsequent to the time in question, no writer or student as far as I know, has yet had the temerity to impute European influence to this highly characteristic Indian industry, whether with respect to the origin, the form, or the ornamentation of the vessels.

Reverting, then, to clay or pottery pipes, we may ask ourselves the very natural question, Why should we admit the greater measure of skill, artistic excellence, and versatility which were exemplified in the production of pots, while we deny the lesser measure of these qualities in producing pipes?

Another query suggests itself, namely, How is it that little or nothing betokens European influence on clay pipes? It certainly does not appear on the square mouthed pipe: there is no sign of it where the very common, conical-headed, ape-like, sitting figures occur, nor can it be detected in connection with the various animal representations—bird as well as mammal—on the bowls. Now and again, where the human face is attempted as a model, the work is so well done as to suggest at first sight the probable presence of a white man not far away, but closer examination compels one to admit, that after all, there is nothing in the work beyond the power of a bright savage of mature years.

When we come to stone pipes, however, it must be acknowledged that the case is somewhat different, for without any doubt, many such are either wholly of white man's make, or show in some way the influence of Indian contact with the white man. Voyageurs and commercial adventurers of all kinds, no doubt, speedily acquired the smoking habit after their arrival on this continent, and nothing can be more reasonable than to suppose that during their hours of enforced idleness in camp, or on the trail, they would relieve the tedium by carving suitable pieces of stone into pipe bowls—a work of comparatively easy accomplishment with chisels, drills, saws, and files of steel. Indeed, even with nothing but a stout pocket-knife, an ingenious or handy man could readily fashion very desirable objects of this kind from pieces of limestone and soapstone, the materials from which many pipes were made. In some cases, no doubt, such pipes were produced as articles of barter with the natives, or as gifts to their leading men. In any event, the Indians similarly equipped in the matter of tools would very soon profit by the example, and produce for himself equally serviceable and ornate pipes. In this way we may account for the capped, bonneted, and hatted representations of human heads, and for the general tone in other specimens that are totally devoid of extraneous carving, as, for example, where the bowl is so accurately cylindrical as to indicate the use of a turning lathe;

yet, some of these, too, may have been made wholly without the use of such machine.

It is, as a matter of course, implied even when not directly stated, by those who assert their belief in the post-discovery origin of most pipe forms, that all such objects were manufactured with the use of steel too's. It is claimed that many of the details could not be worked out otherwise, and much is very properly made of the file-marks that exist on some pipes. Agreeing to the logic of this reasoning, we demand that a similar line of argument be employed when dealing with stone pipes that not only show no tool marks, but that on the contrary bear evidence of having been brought into shape by purely aboriginal methods. Undoubted examples of this kind are found in unfinished specimens, exhibiting purely primitive methods of shaping, boring, sawing and polishing; and the pipe are not straight, but angular, or sharply curved. The nearest unfinished approach to straightness in our collection, is in one, the bowl and stem of which form an angle of forty five degrees. In the largest and most rudely chipped specimen of this kind we have, there is proof the maker's intention to carve a head or something else on the inner edge of the lip, in which case it would probably have faced the smoker.\*

It may be advanced that the new fashion travelled faster than did the tools required to make the pipes, but a statement of this kind possesses not a shred of value when everything else associated with the unfinished objects indicates a period anterior to the Discovery, and if it be contended that even without the European appliances, the Indian succeeded in making very good articles similar in style, it is, then, virtually conceded that he was gifted with sufficient ingenuity and skill to have produced just such pipes without foreign inspiration.

The evolution of the angular pipe through the straight form, from the cigar was inevitable, even among people gifted with much less intelligence and mechanical ability than our Indians were, and a similar statement may be made respecting the ornamentation of these objects, which lent themselves quite readily to decorative skill, and which, as being connected with religious or ceremonial usages, were treated with more artistic consideration than were most other products of their handicraft.

In a recent work by Mr. Joseph D. McGuire, of Washington, D.C.,† he takes the ground that until after the Discovery, the Indians had no pipes but straight ones, and that no attempt had been made to decorate pipes with carvings of animal forms until the hint was given

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\* Dr. W. M. Beauchamp is of the opinion that pipes having carved faces turned from the smoker are of a more recent date than are those that look stemwards. See figure 2. See also remarks accompanying figure 4.

† This volume, "Pipes and Smoking Customs of the American Aborigines, based on material in the United States National Museum," is an exhaustive study of the subject. Mr. McGuire deserves the most cordial thanks of every ethnological and archaeological student, for the great pains he has taken to bring together such an immense amount of information relative to the use of tobacco pipes on this continent, and although most of us may not agree with his contention, that all curved stone pipes, and, indeed, every pipe not of the straight variety, are the result of European contact, we must credit him with having aroused a more critical interest in the subject of early man's workmanship in America, thus sounding a warning note, at quite an opportune time, to the numerous unreasoning theorists who infest literature with their bizarre notions.



by white people. On p. 513 of his volume a reprint from the Report of the U.S. National Museum, pp. 351-645, and fully illustrated, the following passage occurs:—

"It does not appear to have been considered remarkable that the carving of pipes with such great skill should be practically the only example of American Indian art; and it may be questioned whether the small size of the pipes, thereby enabling them to be carried by the owners, sufficiently explains why pipes alone show this skill, fine carving being almost, if not entirely, unknown in other aboriginal stone objects from the area where these pipes are most often found.

"It may, with pertinence," he proceeds, "be asked why we do not find in the mounds other images of stone finished with the skill of the mound pipe, if they are of Indian origin? The religious or superstitious feeling of the seventeenth century would draw the line at idol-making, whereas pipe manufacture would be a legitimate occupation."

This is a lame and impotent conclusion based on false premises, and how much so, would have appeared to Mr. McGuire himself, if it had only occurred to him to read what he had written in the following slightly amended form:—"It does not appear to have been considered remarkable that the carving of pipes with such great skill should be practically the only example of European art displayed on American Indian objects; and it may be questioned whether the small size of the pipes, thereby enabling them to be carried by their owners, sufficiently explains why pipes alone show this skill, fine European carving being almost, if not entirely, unknown in other aboriginal objects from the area where these pipes are most often found.

"It may with pertinence be asked why we do not find in the mounds and graves other images of stone finished with the skill of the carved stone pipes, if they are of European origin. Although the religious or superstitious feeling of the seventeenth century would draw the line at idol-making, not only pipes but scores of other aboriginal stone objects might have been carved as a legitimate occupation by Europeans."

If Mr. McGuire will kindly permit me to use his language in what I have called the amended form of his quotation, I shall stand sponsor for it, and await a reply with some degree of expectancy.

Meanwhile, as the original form of quotation seems to contain in epitome the whole of Mr. McGuire's contention, we may examine it bit by bit:—

(a) "It does not appear to have been considered remarkable that the carving of pipes with such great skill should be practically the only example of American Indian art." This statement may be best met (taking the latter part first) with the assertion that pipes are *not* "practically the only examples of Indian art," unless we limit the meaning of art to the production of animal representations only: but even this is not in accordance with fact, for imitations of animal forms occur on pottery from Peru in the south to Ontario in the north. In Mexico, examples of this kind are innumerable, and in Arkansas they are not infrequent. Are all such due to European contact? If not, why should we exclude the possible spread of effigy notions among peoples in contiguity?—and, when Mr. McGuire refers to the lack of

consideration that has been manifested respecting the fact that so much more attention has been given to the carving of animal figures on pipes than on other objects, the only reply is, that nothing seemed to us more natural than to regard pipes not only as special objects of regard on the part of the Indians, but as articles, which, from their very shape, offered excellent opportunities for carving imitations of human faces, and of many lower animal forms. Thus it was not "considered remarkable" that pipes were carved "with such great skill" in the matter of animal forms. In addition to this, it may be stated, that not a few students are disposed to regard the representations as possessing a totemic value, and it might be rash to deny to some pipes a significance of this kind, for although there may not be a particle of evidence in favor of the theory, we cannot but admit its possibility on most reasonable grounds.

(b) "It may be questioned," writes Mr. McGuire, "if [whether] the small size of the pipes, thereby enabling them to be carried by their owners, sufficiently explains why pipes alone show this skill, fine carving being almost, if not entirely, unknown in other aboriginal stone objects from the area where these pipes are found." I have never heard that the small size of the pipes was ever advanced as a reason why they were carved, and as a reason it is too trivial to be worthy of notice—it is smaller than even the very smallest of pipes—and it has already been stated that fine carving is *not* "almost, \* \* \* \* unknown in other aboriginal stone objects from the area where these pipes are most found."

(c) As to "why we do not find in the mounds other images of stone finished with the skill of the mound pipe, if they are of Indian origin," the answer has been given under (a) and when we come to the last sentence in our quotation we find it is so self-contradictory that no reply is needed.

The simple truth appears to be that there are found in mound, ossuary and other graves, pipes that are purely and unmistakable Indian, *i. e.*, without a particle of evidence of any kind to connect them with the white man, while, quite as undoubtedly pipes of European make, or pipes made subject to European influences, have also been taken from such graves. In either case, the trouble lies in hasty generalization, and a similar difficulty is likely to arise when the contents of a burial place, or of any other deposit, are of a mixed character.

If there is no doubt that Indians lived, and died, and were buried; and that the burials were in some cases, if not in all, accompanied by certain ceremonial usages; and if in places of this kind we discover a well-made piece of pottery, an elegantly formed gorget, or a barbed harpoon, why should we hesitate to credit the American savage of these northern parts with a measure of the mechanical ability that we so willingly concede to a very large extent where Maya, Aztec, and Inca "civilizations" are concerned? In any case, we must use judgment, aside from theory, by taking into account the particular circumstances connected with our find. We should not be disposed to deny a pretty large amount of intellectuality to a race of people capable of *inventing* a birch-bark canoe, but, perhaps it will yet be

shown that no canoes existed until the natives of Guanahani or Watling Island, or some other place, had seen the pinnace in which Captain Colon rowed ashore to pay his respects to their chief !

Under the following heads is a crude scheme of evolution showing one way in which, to the writer, it seems possible to trace the pipe's ancestry, without forgetting for a moment how precarious it is to theorize when the missing links are so numerous.

1. Smoking is an American aboriginal custom which originated, no one knows how long, before The Discovery.
2. All the aboriginal peoples did not smoke.
3. Those who smoked did so ceremonially rather than for solace.
4. The custom may have been brought about in some way from the almost universal veneration connected with fire.
5. The rising of smoke may have been suggestive of a means of communication between the upper and lower worlds—between the earth and the sun.
6. The production of smoke through the mouth, perhaps, resulted from blowing small quantities of tobacco (or other vegetable material) when ignited on the ground, or, in the hand.
7. A wooden tube through which to blow would prove serviceable, or,
8. The plant-leaves put in proper shape could be held in the mouth, as a cigar.
9. In either case inhalation and expulsion of smoke from the mouth would soon accompany mere exhalation, or blowing.
10. The use of a tube would suggest an enlargement at one end to hold the material, instead of blowing at it on the ground, or,
11. The tube may have originated as a holder for the cigar.
12. A bent, or crooked wooden tube (bamboo, or pith-stem) would afford the necessary hint for convenience to a smoker when standing or sitting.
13. When crooked stems were not procurable, a hole bored in the side of a piece meant for a bowl, would serve to receive a smaller piece to hold in the mouth. In some such simple way,—a way that requires not much inventiveness on the part of the savage, and no stretch of imagination on ours,—it is probable the idea of an angular pipe was hit upon.
14. With a knowledge of pottery, clay pipes, in imitation of the compound (stem and bowl) wooden pipe, would follow as a matter of course.
15. Decoration by means of straight, incised lines, or by lines made round the bowl, were probably suggested by a similar style of ornamentation on pottery vessels.
16. Decoration in relief would be brought about also from clay vessels.

17. Perhaps stone pipes came in after clay pipes, but the straight, stone tube is found where the art of pottery-making was not known, *e. g.*, British Columbia.

18. Old writers refer frequently to "stone" pipes which were almost certainly made of clay. Many intelligent people make a similar mistake yet.

19. Unfinished stone pipes show conclusively that many such were made by primitive methods of sawing, flaking, pecking, rubbing and boring.

20. Some of the best stone pipes exhibit much skill in bringing out animal features, yet a close examination of them, with the aid of a magnifying glass, yields no sign of marks requiring the use of anything but primitive tools to produce them.

21. Other stone pipes were just as certainly the work of white men, or, of Indians with European notions and European tools.

22. Pipes of white man's make were imitated by Indians when they could employ the white man's tools.

23. That the Indians did so is not by any means a proof that all their ideas respecting the shapes and ornamentation of these articles were derived from white man.

24. To admit that our Indians were indebted to Europeans for every notion respecting the shapes and decorative devices in pipe-making is to deny that the aborigines possessed any imagination, or much mechanical ability, and, therefore, that all the so-called "bird-amulets," and "boat-amulets," and "banner-stones" of so many patterns, and "gorgets" of shapes innumerable, and stone tubes from two to twelve inches in length, *not* intended for smoking pipes; to say nothing of the axes, and adzes, and chisels, and gouges, or of the multifarious shapes we find in bone and shell, are, without exception, products wholly beyond the inventive capacity of such natives as inhabited the basins of the St. Lawrence, the Hudson and the Ohio, which is absurd.

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## THE WORKING OF NATIVE COPPER.

The presence of copper among Indian relics has, for a long time proved a wonderful source of inspiration to those whom Dr. C. A. Peterson, of St. Louis, in a recent paper on Mound Builders, calls "half baked archæologists," some of whom regard it as a proof that the copper-workers were a superior people who preceded the Indian we know, and whom the latter exterminated. Coupled with this belief were some others; one was that specimens of this metal found in the shape of tools had been cast in a stone mould; and, another, that they had been hammered into shape—a stone "set" or swage having been used to regulate the shape. As it was claimed also that tools of this kind were tempered, we often hear the statement made that the edge of such an implement was so hard that "you couldn't touch it, (i.e., mark it) with a file."

One might readily forgive a theorist whose knowledge of primitive Indian life led him to attribute a knowledge of smelting, and consequently, of casting, to the aborigines, but what should be said of those who either having tested, or having had the opportunity and appliances to test, the quality of a copper weapon, or tool, continued to insist on its marvellous hardness as a result of tempering?\*

We now know, just as well as it is possible to know anything with respect to Indian working methods, that prior to the appearance of the white man, the natives in this part of America were totally ignorant about either smelting or melting metallic substances, or of anything respecting the use of moulds; and that with regard to tempering copper they were destitute of all knowledge whatever, in which respect they were no more ignorant than civilized man is to-day, and has always been, while nothing can be more grossly outrageous than the statement that they understood the art of welding this metal.

We are, perhaps, warranted in supposing that our Indian discovered for himself that the sudden cooling of hot copper rendered it softer and more malleable, just as he must have learned that pounding the metal when cold, with a stone, caused it to split or crumble; and his knowledge of results from hammering may have taught him to reduce his material if necessary, by laborious methods of cutting and sawing, to something near the shape of the desired object, before

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\* The latest reference of this kind I observe in the *St. Louis Republic* of Sept. 6, 1903, containing an elaborate review of two books written and printed by a Rev. Dr. E. S. Curry, who lives "In the seclusion of the Ozark mountains." For this reference I am indebted to Dr. C. A. Peterson.

The writer of the editorial, no doubt inspired by the venerable author's own assertions, states that "the most interesting relic in Doctor Curry's collection is a tool made of copper and tempered harder than steel. . . . It has a handle of copper welded on the blade. Both the welding of copper and the tempering of this metal are lost arts, proving that the races which inhabited this continent thousands of years ago, were highly civilized, and, it is claimed by Dr. Curry, were far in advance of the races of to-day." Elsewhere, it is related that "a small oblong object" was discovered "cemented in the centre of a curious-looking rock" and that "this record is on tempered copper, three sides being covered with hieroglyphics and the whole scarcely an inch square. The event recorded thereon occurred ten thousand and forty six years ago, according to Dr. Curry's reckoning."

Really, when a man can calculate cupiferous, prehistoric dates so accurately, it would seem almost impertinent to characterize his statements as either knavish or foolish when he asserts that not only did the Indians temper copper but that they actually knew how to weld it, more than ten thousand years ago!

he began to use his hammer-stone. The chief objection to this supposition is, as far as I am aware, that no specimens have been found showing such a stage of progress in his work. In this connection, however, we must not lose sight of the strong probability that the native workman would, at the outset of his operations, choose a piece of copper corresponding in some measure to the size of the object he intended to make, for it should be borne in mind that the native or virgin metal assumes all sorts of jagged or ragged forms *in situ*. It is, thus, comparatively easy to find connected with large lumps or masses, pieces that are readily detachable and suitable for the making of small objects such as beads and arrow-points, without an excessive amount of hammering.

Of late there has been a slight reaction in connection with the tolerably high estimate some have been disposed to place on aboriginal, artistic and mechanical achievements. Reference is made elsewhere in this report to the disputation with respect to pipes; and Mr. Jos. D. McGuire, who has stated his belief that all but the simplest form of pipes are of European origin, directly or indirectly, has also asserted the opinion that sheet copper ornaments, whether plain or embossed, owe their existence to the white man's influence.\* In the course of Mr. McGuire's remarks replying to Mr. Clarence B. Moore in the *American Anthropologist*, Vol. 1, p. 47, 1903, the statement is made that "when copper is found in thin sheets and those sheets are embossed and ornamented with repoussé work; and when spearheads are furnished with sockets, and the sockets are furnished with nail holes, we may safely assert that white influences are proven." In this country we are concerned, in a general way only, with the difference of opinion respecting plain and embossed sheet-copper, but it may not be out of place to offer a few remarks on this phase of the discussion before referring to the portion of Mr. McGuire's statement which more closely affects Canadian copper specimens.

It would seem to be taken for granted by some writers, that all the North American Indians except, perhaps, the Mexican peoples, had, long before The Discovery period, reached a condition of non-progressiveness. It is tacitly admitted that a good deal of advancement must have been made at one time, either on this continent or somewhere else, for although our natives were properly enough regarded as savages, they were, as a rule, of a much less degraded type than many we know about in other portions of the world. Now, if we concede a measure of progressiveness to the Indian here, up to a certain time, whether he was truly aboriginal, or merely the remote descendant of some long-forgotten ancestors from beyond the Atlantic on the one hand, or the Pacific on the other, why should we argue that in process of time he came to a dead stop?† It is not likely that such a

\* *The American Anthropologist*, vol. 5, Jan.-March, 1903, contains a discussion on "Sheet Copper from the Mounds." It is contended by Mr. Clarence B. Moore, of Philadelphia, that the sheet copper found by him in the mounds of Florida is of purely native origin, while Mr. Jos. D. McGuire, of Washington, holds that it has been produced subject to European influences.

† It is not overlooked that many instances are known of what appear to be, or to have been, absolute non-progressiveness—lapsed potentiality—among peoples in various stages of advancement, but there is no evidence that the natives of America were in this condition.

view holds good even when much less advanced peoples are concerned. The potentiality involved in the taking of one step warrants the belief that another step is not only possible but probable. In very low conditions of society steps thus taken may be short and with long intervals, but variation of environment means progress or extinction to all living things. It has never been asserted that when Europeans reached America there was any indication or any likelihood of the aborigines disappearing, notwithstanding that something like chronic warfare was waged among many tribes of them. On the contrary, there is reason to believe that not a few tribes or "nations" pursued tillage to some extent, and were peacefully inclined. We know that some lived on the sea-coast, and some inland; some on the plains, and others among the hills; some where four-footed game was plentiful, and many depended to a large extent on lake, or sea, or river fish. Then there were dwellers in warm as well as in cold latitudes, and there were without any doubt, those of cosmopolitan tastes—rovers; others who had been, or were, captive slaves, besides thousands who were, for various reasons, adopted. Aboriginal life, therefore, was not on a continental dead-level, although there was undoubtedly much sameness. In such conditions, therefore, as have been adverted to, an Indian must have proved an unusually low specimen of our race, if he failed to accommodate himself in some measure to his surroundings. It is absolutely certain that he did so accommodate himself, and it is scarcely necessary to adduce any proof to this effect. Mere mention may be made of the birch-bark, elm-bark, and solid wood canoes; of the bark and the skin wigwams, and teepees; of pottery and basketry in multitudinous variety: of stone axes and adzes, plain and grooved; of stone gouges, or hollow adzes; of stone beads and numerous other forms of personal decorations in the same kind of material, as well as in bone and shell; and, in every case, of such a character as to preclude the remotest suspicion of European provenience.

We are hazarding no wild guess when we surmise that primitive man's inventiveness was chiefly the result of hints afforded by natural conditions, or by conditions arising from inevitable changes in his mode of life. In other words, he possessed a measure of adaptation. Having arrived at what he regarded as the best form of any tool or weapon, he choose for his purpose such a piece of material as, with least labor, would yield the desired result. In this way, a bit of sheet copper from a fissure would be quite enough to suggest to the aboriginal mind this or that use, to which such material might be applied. Copper in this condition is not infrequently found. For a good many years I had a specimen of this kind about three inches long and from an inch-and-a-half to two inches wide, much thinner than any sheet-copper of commerce I have ever seen.\* Again, in the making of spear or arrow-heads, it was necessary to hammer or rub the copper so thin that portions of the metal forming the edge of the object would become unduly attenuated. In some such way, if in no other, the man who failed to get the idea of making a sheet, however small, if he wanted one, must have been in a condition of imbecility we would not expect

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\* Mr. McGuire himself refers on p. 34 to the native metal being found in this form, when he says, "the crude metal is primarily in the condition found in the mine; that is, in the nugget or in the sheet as found in the fissure of the rock."

to find in the case of one who was capable of using a hammer with so much skill. In some similar adventitious manner, the art of embossing may have been suggested.

But it is when the statement is made that "when spear-heads are furnished with sockets, and the sockets are furnished with nail-holes, we may safely assert that white influences are proven," that we, in Ontario, are most concerned. It may at once be admitted that a considerable proportion of native copper tools and weapons, more especially those made with sockets, show in their production a greater degree of skill than is usually credited to the Indian, and it is not at all unlikely that in some cases the objects in question were either of white man's make, or the result of the native smith applying white man's methods. The socket is pointed to as a proof of "white influences." Now, what is a socket? It is simply the opposite of a tine, or tang—a bearing to receive a handle, instead of being received by one, and a device of this kind must have been known to the Indian long before he discovered the malleability of copper. At any rate, he employed socketed horn and bone arrows, that is to say he hollowed the ends of antler-tips, and of bones, or he used in the latter case existing hollows, for the insertion of a shaft. Without this hint, however, it would appear almost impossible to manipulate copper very long without having the idea of a socket suggested. The hammering of the edges of a flattened piece would tend to curvature, and a very interesting example of this kind is figured by Mr. Clarence B. Moore, on page 371 of his last excellent volume, "Certain Aboriginal Mounds of the Florida West Coast, and of the Apalachicola River."\* In this example the workmanship is rude enough in character to be regarded as purely aboriginal, yet we are not to conclude that the maker had any notion of forming a socket. Having beaten the virgin metal out until the edges were too rough and jagged to hold in the hand, the workman simply hammered them down, and in so-doing, they naturally took a curved form, because the material was too thin to receive directly the full force of the blows. Such a circumstance as this, was, in itself, enough to suggest the socket idea, for there was the receptacle, and what could be more natural than to think of pushing a stick into it, just as one would slip his foot into a moccasin, or his hand into a mitten.

For a long time, I was, myself, somewhat dubious respecting the ability of a savage to produce such specimens of copper-work as even the small collection in the cases of the Provincial Museum illustrate, but when one takes into account the extreme ductility of this metal, and the comparative ease with which it may be brought very closely to any desired form mainly by cutting, laborious and tedious as the processes may have been, the wonder as to how the work was done ceases to a very large extent. When it is known to us, as Mr. McGuire correctly states, "that almost from the very beginning of the hammering process the metal begins to crumble whether hammered cold or hot."† we may safely enough credit the Indian with

\* "Certain Mounds," etc. Reprint from the Journal of the Academy of Natural Sciences of Philadelphia, Vol. XII. Philadelphia, 1903.

†*American Anthropologist*, p. 34, Vol. I, 1903. This statement is a little too strong, for pure copper will bear a good many blows before it shows signs of breaking up.



having, in his own crude way, made a similar discovery, and being thus led to conclude that the more cutting and the less hammering he had to do, the better. That he did make use of copper long before he ever saw or heard of a white man there cannot be any reasonable doubt, and it is almost equally certain that in doing so his object was rather to produce articles for personal decoration, than for purposes of utility. Like all others in similar conditions of society, as well as like most of ourselves, he had an eye for natural beauty, and for oddities in such objects as came within his field. A streak, a spot, a glitter, a sheen, a sparkle, an uncommon color, or any peculiarity in form, if usefully or decoratively adaptable, attracted his attention. To him, therefore, a stone that was soft, that he could hammer, that was easily polished, and which, when polished, was so beautifully bright, must have proved a more than commonly desirable thing; and, to those whose habitat was in the neighborhood of such deposits, a highly valuable object of exchange.

It is probable that, as already stated, most, if not all, of the so-called copper "tools" were, in reality, more for ornament than use, or, for employment in usages *ceremonial*, to use what is sometimes a much abused word. As cutting-tools they could not keep an edge as well as those made of chert, or other more purely silicious material; and as spears, arrows or fish-hooks their use must have proved very inadequate when compared with results from less yielding material like stone and bone. Still, it would be rash to assert that copper in implement shape had no practical use, for one may readily imagine various purposes to which tools of this kind might have been applied.

It would appear, therefore, that to cast any doubt on the pre-discovery Indian's ability to imitate in copper what he already had before him in numerous forms as the equivalent of sockets in wood, bone, leather and textiles, is to place him in a mentally inferior position as compared with other aborigines, who, with extremely low brain capacity, have produced mechanical devices of marvellously ingenious kinds; and this view of the case is materially strengthened when it is remembered that there is not a particle of evidence to show that sockets are of post-discovery date.

It is also contended that the presence of nail-holes in copper sockets is a reason for the assertion "that white influences are proven". Is it? Much of what has been said respecting the evolution of the socket applies in a modified way to the nail-hole. The use of holes for attachment purposes is an ancient Indian device, as a substitute for pockets, and we know that cracked pottery and "banner-stones" were held together by means of holes being bored on each side of the fracture for thong-binding purposes. (Figures 29 and 30). Holes were bored through stone and clay discs from one-fourth to one-half of an inch in thickness; similarly, slate tablets or gorgets were supplied with from one to half-a-dozen or more perforations; deep ones had to be made in the production of smoking pipes, and we find stone tubes from two inches to upwards of a foot in length accurately drilled, and sometimes with a much smaller opening at the one end than at the other. We have examples also of fragments of large shells, bored not only sidewise, but edgewise; in the latter way for the purpose of making the kind of bead known to the Iroquois as

*runttee*; but, what is still more to the point, we find quite a number of bone harpoons or spears provided with holes for handle-fastening purposes. It may, no doubt, be urged that the last-mentioned device is the result of European contact, but it is quite easy to make a statement of this kind respecting almost anything the Indian ever produced.

It is more likely that holes made in bone harpoon haft-ends were to receive sinews or thongs, rather than anything in the shape of a nail, or of a rivet, and the same may be said with regard to holes in the sockets of copper tools. We, as a matter of course, would use a metal nail, or something in the form of a pin, but is more probable that the Indian employed a ligament. But, tacitly admitting as Mr. McGuire does, that the "nail-hole" in a socket, or in a half socket (for it is this, and not a whole, or closed receptacle, these tools and weapons have) is quite as characteristic of the white man's work as is the socket itself, why is it that so small a proportion of the copper specimens intended for a handle are so provided? Would not the white's influence extend to the hole as well as to the socket which he had taught the Indian to make? Why, then, are there many more non-holed than holed sockets?

That the Indian recognized the difficulty of perforating copper is evident from the somewhat ingenious device he adopted to overcome it in the making of beads, an art which, it will scarcely be claimed he owed to the white man. The material for these he shaped in short bars, "scarfing," as a blacksmith would say, each end; that is, making it wedge-shaped, so that when bent to make the ends overlap, the thickness did not exceed that of the other portions; while an aperture remained in the middle of the simple coil. By this means, too, he succeeded in getting a much smaller hole than if he had attempted to drill it.

But in the perforation of such thin material as the socket of a spear or of an arrow he would meet with no difficulty in boring a hole from an eighth to three-sixteenths of an inch in diameter by means of a flint point, and should anything in the way of suggestiveness have been required, examples must have occurred frequently during the course of the hammering process.

From these and other considerations there would seem to be no doubt that copper manipulation was practiced by the Indians long before The Discovery, and that the invention, or application of the socket, as well as the use of a tying-hole, in connection with arrow and and spear-heads, is wholly due to aboriginal ingenuity or adaptiveness.

There is, however, as little doubt that the white trader provided himself with articles of copper as merchandise, just as he is known to have done with wampum and with pipes—a proof, it may be advanced, that all the imitated objects were regarded with more than common esteem by the Indians. In this connection, too, we are absolutely certain that the wampum of white man's make was as close a copy of the aboriginal hand-made article as a turning lathe could produce, because the Indian clearly preferred his own medium of exchange to the metallic and immensely more valuable currency of the European. Intensely conservative as we know our natives to have been (as, indeed, most aborigines are) are we not warranted in

claiming that not only white man's wampum, but white man's pipes, and white man's copper tools and weapons were produced in close imitation of Indian workmanship, and to satisfy Indian taste rather than that the whites introduced totally new patterns, and that the Indians gladly adopted them? To admit European intrusion thus, is simply to recognize the trading instinct that has always characterized those of our own race. Birmingham Buddhas, and Manchester calicoes are exported to India, but the Hindus made bronze idols and cotton cloth long before they had any dealings with John Kumpanee. The "coppers" (large sheets of metal weighing many pounds, and peculiar to British Columbian Indians)\* were imitated and employed for commercial purposes by the Hudson Bay Company, but these, and other instances of a similar kind that might be adduced, would lend no color to any statement respecting the European origin of Buddhas, and calico and "coppers."

Hitherto there has, undoubtedly been a lack of discrimination with regard to the origin of some American material from places of former Indian occupation, or association, but the equally indiscriminate claim set up by Mr. McGuire will probably lead to a more intelligently critical examination both of future finds, and of much that now reposes in museum cases.

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Since the foregoing was written, I have had an opportunity to examine two specimens of worked copper, belonging to Mr. H. A. Van Winkel. One is a small axe-blade, three and three-eighths inches long, fully a quarter of an inch in thickness, and of the usual shape, tapering from an inch and five-eighths in width at the cutting edge, to seven-eighths of an inch at the poll; the other is a four-barbed spear or harpoon, a little over nine inches wide, and varying in thickness from five-sixteenths of an inch, on the back, to one-eighth along the barbed edge. There cannot be a doubt that both have been made by cold hammering. The scales and laminations resulting from overlapping and pounding are quite plain, while on the harpoon there has been made an awkward cut with a thick-edged tool, like a stone axe or chisel. On both, are striæ, the parallelism of which is strongly suggestive of file use, those on the axe being much finer than those on the spear. Should it prove that the marks in question are the result of files, it would only go to show that the probable Indian workman used for finishing purposes a more effective tool than a piece of sand-stone. All the markings on the little axe, except those on the cutting edge, extend from end to end of the implement as if it had been "draw-filed," and are more difficult to account for on the supposition that a steel file was employed to rub it, than that it was rubbed lengthwise over some finely gritty bit of stone.

The barbs of the spear have clearly been made by cutting, as the inner, or lower edges of them are quite rough, which would not be the case had they been filed into shape. The appearance of the inner angle also leads to a similar conclusion.

As Mr. Joseph D. McGuire, the author of "Pipes and Smoking Customs of the American Aborigines," may be properly regarded as

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\*An excellent specimen of one of these very remarkable objects forms part of the British Columbia collection in the Prov. Museum.

the chief exponent of the view that to European influences, the Indian owes his knowledge of effigy-pipe making, as well as of all that is best in the copper-smith's art, he was supplied with a copy of the foregoing article in manuscript, and there can be no doubt that all who are interested in the subject will be much pleased to read the following reply which he has been good enough to make.

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REPLY TO WHO MADE THE EFFIGY PIPES?

*By Joseph D. McGuire.*

I am obliged for the privilege accorded me, to print anything I have to say controverting Mr. Boyle's statements contained in this memoir in reference to pipes, as well as to certain copper objects. I know no one more familiar with these objects than he is, and the subjects being yet in the controversial stage it is only fair to present both sides. It is a pleasure to find that he agrees with me on so many points, yet there are others of radical divergence, to some of which I shall call attention, and shall point out one or more cases in which he does not appear to have properly weighed available material. My publication covered three hundred pages on a subject which had scarcely been touched upon by any prior author; most of the material had to be taken, a sentence here, a sentence there, from a host of old publications relating to early contact with the North American Indian. Much material was gathered and some years were spent in compiling the paper. All references to pipes and pipe customs were copied on library cards and every item believed to weigh on the subject was preserved. In all, two thousand and more cards were collected, many of which were to a certain extent contradictory of others yet every extract was used when not a duplicate, nothing was suppressed; in addition much labor was performed with primitive tools, and my own views were freely expressed with little thought of the controversies which such expression would give rise to, by reason of certain of them being different from accepted beliefs. All pipes were found to be distributed over certain geographical areas; and of the sixteen or seventeen varieties each was found to belong to a particular contiguous area, and with one exception, these areas were small when compared with the whole area of the continent; that exception was the tubular pipe which was found to belong to no particular locality, a strong argument to its antiquity and to its being the original type; they were found to be made of bone, wood, pottery and stone, as well as of wood and stone combined. Other pipes of other forms were found to correspond in a measure with the spheres of influence of French, British, Spanish, etc., and such influences with others led the writer to believe that their shape, the work on them, and the characteristics of the work showed European influences. What the Indian was able to do was not at issue and has not entered the discussion until now, for it will be seen that Mr. Boyle and I agree on the subject as to what the Indian was capable of under the white man's influence. Were extraneous proof of this necessary we have it from Garcillas de la Vega, who says that the native workman soon learned

to excel his master in the use of tools. The imitation of the flaring mouth of a trumpet in certain pipes of the Iroquoian type is so pronounced, that it is a surprise that one should consider it at all likely to have been evolved from a pottery vessel, for such a flare as occurs in the rim of such pipes is never seen in pottery vessels that have come under the writer's observation.\* The assertion that little or nothing betokens European influence on clay pipes raises a question of judgment between us, for to my mind there is no stronger evidence presented anywhere of European influence than is shown in the Iroquoian pottery pipe. The paste from which it is made shows it, the hard burning of the clay strengthens the belief, while the modeling of the figures seen on many of them is typically European, and quite distinct from any clay modeling found elsewhere in America. The heads seen on these pipes are of European type, the heads of birds are treated according to European technic, while the figures often observed on the faces of the bowls are but copies of the sacred pictures in the Catholic churches. Mr. Boyle admits that "Now and again when the human face is attempted as a model, the work is so well done as to suggest, at first sight, the probable presence of a white man not far away, but closer examination compels me," he says, "to admit that after all there is nothing in the work beyond the power of a bright savage of mature years. When we come to stone pipes it must be admitted that the case is somewhat different." I will be glad to have our differences of opinion judged from the above quotation, compared with any assertion in my paper on pipes. To agree that any Indian could model either of the bird pipes illustrated by me from the Douglass or Beauchamp collection, intensifies the belief that he and I look at art from greatly divergent points. The subject is one, however, that must be fairly studied, and deliberately judged upon evidence, and the final judgment will then be of value. Mr. Boyle again falls into error in asserting that "It is, as a matter of course implied even when not directly stated by those who assert their belief in the Post Discovery origin of most pipe forms, that all such objects were manufactured with the use of steel tools. It is claimed that many of the details could not be worked out otherwise, and much is very properly made of the file marks that exist on some pipes." In this instance, I evidently represent "those who assert," but I do not suggest, nor have I even believed, "that all such objects were manufactured with steel tools." That the pipe can be bored, pecked and ground into shape with primitive tools I long since demonstrated, and exhibited such pipes and examples of the boring, and grinding, and pecking of stone, at Chicago, along with the rude tools employed in the work. It is a pleasure to find that Mr. Boyle agrees that much is properly made of the file marks which exist on some pipes, for a recent author asserts that there are no pipes having file marks on them in the museum, and says the supposed file marks can be easily imitated; naturally, when such a point is reached further discussion becomes distasteful so that others must settle the matter. It may

\* There are in the Provincial Museum several clay vessels well curved outwardly at the lip, quite as much so, indeed, as are many of the pipes but not to the same extent as appears on a few of the pipes—still, enough, and more than enough to have proved suggestive.  
D.B.

be appropriately stated here, that the type of pipes upon which tool marks are most commonly encountered are usually finished with a glass polish, itself a suspicious feature, they are often so carefully smoothed as to leave no tool marks visible. It was only by observing these file marks in an unfinished specimen that search for others was instituted, and similar marks were found in a sufficient number of instances to satisfy me of the correctness of the opinion expressed which I see no reason to modify.

I am compelled to deny that anterior to 'The Discovery, the Indian ever "succeeded in making very good articles very similar in style," and consequently cannot "concede that he was gifted with sufficient ingenuity and skill to have produced just such pipes without foreign inspiration."

Mr. Boyle takes issue with my remarks, saying that "it is a lame and impotent conclusion based on false premises" to assert as I did, and as I reiterate, that "It does not appear to have been considered remarkable that the carving of pipes with such great skill should be practically the only example of American Indian art, unknown in other aboriginal stone objects from the area where these pipes are most commonly found." It is to be remembered here that in the instance quoted I was discussing the curved-base mound-pipe, the bowls of which are commonly carved exquisitely in the shape of men's heads, and of snakes entwined around the bowl, of turtles on the bowl, and of birds and animals of many different species, one bird being represented in the act of feeding. Two hundred such pipes were found by Squire and Davis in a mound in Ohio, all of which, except a very few now in the American Museum of Natural History, are in the Blackmore Museum, in England. These carvings are not approached in artistic skill by anything else in Aboriginal American art in stone. That the imitation of animal forms does occur on pottery "from Peru to Ontario" is not germane to the subject, and no matter how innumerable they may be in "Mexico" or in "Arkansas" it will only be necessary for any one to compare the difference in such animal forms with the forms on these curved-base mound-pipes to be convinced that the one represents savage art, that the other is typical of the finest type of art in carving, as practised in Europe during the colonial period. The imitations of animal forms on pottery, and more pronouncedly such representations on stone in America wherever found of Indian origin, are rude in the extreme when compared with the forms of the figures on the curved-base mound-pipes, with the form of the monitor pipe or with the figures of many of the unornamental effigy pipes, or with many of the Iroquoian clay pipes. One thing strongly influencing me in concluding that the curved-base type of pipe was due to foreign influence was that certain of them were found to have been bored out by means of a tubular cylindrical drill, the end of one of these drills was apparently loose on the shaft, having made a hole of peculiar shape in excavating the bowl. This was almost certainly owing to have been bored by means of the pump drill, an implement not believed by the writer to have been of use in America prior to the coming of the whites. Further, it is known that the mounds have in many instances been found to contain crucifixes, medals, coins and other objects of European origin.

I considered nothing "too trivial to be worthy of notice" and the suggestion that I have done so impresses one with the necessity, which everyone labors under to tell all and to leave nothing unsaid, which even remotely relates to the subject under discussion. What aboriginal invention of the birch bark canoe has to do with the making of pipes, I fail to see.

As to the scheme of evolution of the pipe which Mr. Boyle arranges under numbered paragraphs, I see nothing to criticise up to the 24th paragraph, as it apparently coincides with my own views, nor do I find therein many missing links, though one article at least, namely, stone tubes from two to twelve inches in length, I believe to be drilled by European tools if not machinery, and other of the articles enumerated are deserving of critical study before one would be justified in the expression of a reasonably accurate opinion concerning their origin.

I do not believe that all pipes, but do believe that many pipes, are due to foreign influence in shape and modes of manufacture, and that in shaping many of them the file and other cutting tool of the whites were used. "Now-a-days," says Mr. Boyle, "some of us have adopted views calculated to make it appear that the Indians of this part of America were indebted to European influence for inspiration respecting some very simple devices." I do not hesitate to say that I have no doubt on the subject, and think that a careful reading of what Mr. Boyle has herein written will convince the reader that he has in certain instances practically admitted the case to be so. He opens his paper by showing some of the curious beliefs concerning the American Indian which at one time were considered plausible, but which have since been abandoned; rest assured, there are yet others that must give way to archæological study. Certain objects of stone we know, from recorded history, were presented to the natives by nations; others, we are informed, were traded in probably wampum pipes and stone axes or celts. This trade has extended over both Americas, from the earliest period of white contact, but few of us have ever seen a specimen, the owner of which would admit the possibility of its being post Columbian. I am glad to say that mature deliberation convinces me of the correctness of my position originally expressed, and regret not to be able to agree with those who differ with me; one of us must be wrong, but which one is the query?

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#### NOTES ON COPPER WORKERS.

*Jos. D. McGuire.*

Mr. Boyle asserts that I have stated my belief that sheet copper ornaments, whether plain or embossed, owe their existence to the white man's influence, and correctly quotes me as saying that "when copper is found in thin sheets and these sheets are embossed and ornamented with repoussé work, and when spear heads are finished with nail-holes, we may safely assert that white influences are proven." It should be remembered that this copper is of great thinness, and is not, as an old writer has said, such as could be bent by the fingers, but is

of less thickness than is commercial sheet tin, and of equally uniform surface. Mr. Boyle admits that "he was somewhat dubious respecting the ability of a savage to produce such specimens of copper work as even the small collection in the Provincial Museum illustrates; but," etc. I am not familiar with the contents of the Provincial Museum, though, if its specimens at all resemble, as I presume they do, those in the New York State Museum, recently illustrated by Dr. Beauchamp, they cannot be compared with the sheet copper from Florida, for I cannot see the slightest resemblance between the two. There is, however, a great similarity admitted between the copper from Florida and a sheet of thin copper from a Georgia mound, the figure on which resembles an eagle or hawk with wings spread and head turned to the side. The repoussé work is of a regular, geometric pattern, which suggests, it is believed, some of the characteristics of early European armor. In at least one instance, thin sheet copper was found in a mound said also to have contained the bones of the great auk, and also the bones of a dachshund. Yet, as the copper analysis showed the copper to be of American origin, the probable foreign origin of the bones was ignored as unworthy of consideration.

The brain capacity of the Indian does not properly enter the discussion nor does the Pre-discovery Indian's ability to imitate in copper what he already had before him in numerous forms as the equivalent of sockets of wood, bone, etc., apply. The argument that through centuries of life the Indian would gain a sufficient knowledge to do thus, or so, is a very different proposition from that other side which suggests the question, Did the American Indian do thus or so?

That holes were drilled in various substances cannot be doubted, but that when such holes were bored they were made for the purpose of binding appears only partially true. Mr. Boyle thinks much "of what has been said respecting the evolution of the socket, applies in a modified way to the nail holes in it," this argument appears to me insufficient. In an examination of Mr. Beauchamp's illustration of copper objects now before me, those without nail holes appear more ancient than those with such holes, and the objects with stems or tangs appear more ancient than either. One strong reason for this belief is that the stemmed type is much the most primitive.

It is conceded that it is quite easy to make statements respecting almost anything the Indian ever produced, but on the other hand, it should not be denied that statements are, or should be, weighed somewhat in reference to the experience of the individual making the statement.

That the American Indian possessed copper artificially worked, no one at all familiar with early American publications can doubt; that he beat and pounded it into sheets is equally true; but that the whites employed copper as one of the principal articles in traffic with the natives is undoubted, but barring the pots, shown to be commonly made of brass, there scarcely appears to have survived a single copper implement made from European copper. Is this not so?

In a recent discussion of this subject, with a friend, he suggests with much force that personal inspection is as valuable a test as any, and good illustration is often quite as valuable.



## WORKING METHODS.

## UNFINISHED STONE PIPES.

In figure 1 we have illustrated an unusually large, and otherwise peculiar specimen of what was probably meant to be a pipe-head. It was found on the farm of Mr. Leith, township of Binbrook, county of Wentworth, and was presented to the Provincial Museum by Mr. C. W. Hartman, of Cincinnati. It is of Huronian slate, almost seven inches in height, and four in breadth, having a thickness of an inch and three-eighths at the back of the upper portion, and thinning to seven-sixteenths of an inch near the lowest point.



Fig. 1 (26,544)  $\frac{1}{2}$  diameter.

The large size and corresponding weight of this object scarcely suggest its possibly intended use as a pipe-head. Another specimen (11,103) from the farm of Mr. A. Buie, in Notawasaga township, although somewhat less in size, possesses the same general character, and a finished pipe of monkey-like features (figure 28, report for 1886-7) from the farm of Mr. Findlay McCallum, near Milton, strongly resembles this Hartman specimen in outline. The three make a fairly good series, although differing considerably in size, and form a good illustration of what is well known respecting other examples of aboriginal handicraft, namely, that the whim, or caprice of the workman was largely governed by the size and quality of his material. For a long time there had been some doubt respecting the purpose for which 11,103 (figure 31 in the report for 1888-9) had been

made, as the work was not carried far enough to do any boring for the bowl or stem, but in the case of figure 1, the bowl-hole is bored to the depth of nearly half an inch. The beginning of another hole has been made by pecking, perhaps as a start for drilling, above the large orifice in the middle. Most of the surface is quite smooth, showing few tool marks of any kind.

There can be no doubt that this unfinished piece of work, figure 2, was intended to be a pipe, and there is just as much certainty that the workman's purpose was to model some kind of animal head on the edge of the bowl overlooking the stem. It requires only a slight



examination to conclude that before any work was done on this piece of limestone, it was in pebble form, perhaps sufficiently irregular in outline to suggest the bowl and stem of a pipe, but, in any case, just a water-worn stone.

Notwithstanding the extremely rough nature of the chipping, an enormous amount of work has been performed, and performed too, in a purely primitive way. On this specimen there is not a single mark to indicate the use of any tools other than those of stone. Some of the flakes were very large as may be seen by the scars on the diagram, and it may have been an attempt to strike off one of these that caused the fracture at the neck of the stem.

The pieces were found a hundred or more feet apart, and one piece a long time after the other. The former circumstance is suggestive of some "temper" on the part of the man whose unlucky blow spoiled his work.

For this instructive specimen we are indebted to Mr. W. G. Wright, who found it in the township of Nottawasaga.

The saw-cut near the top of the intended bowl, and which extends nearly as far round on the other side, was clearly made with some cherty or other silicious tool, perhaps only a flake, either held directly in the hand, or in some way attached to a handle. If, then, we regard the quality of the stone, the character of the work-

4 AR.

Fig. 2 (9,801). Reduced.

manship, the intention to make a carved pipe, and the design of forming some kind of figure on the bowl, we have all the conditions of a primitive nature that we may, and do usually, suppose accompanied a purely paleolithic method of working, and it is difficult to conceive an Indian workman proceeding in his simple way to form a pipe in imitation of some European model, as it has recently been asserted he did.

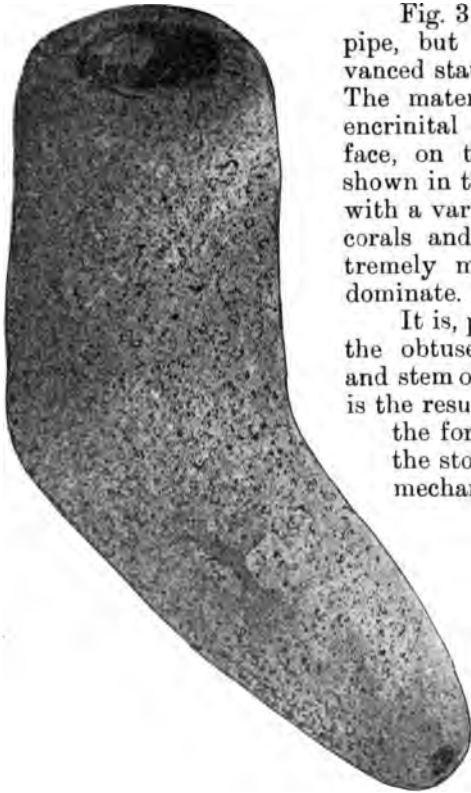


Fig. 3 represents another unfinished pipe, but in a considerably more advanced state than the one last described. The material may be referred to as encrinital limestone, the weathered surface, on the opposite side from that shown in the engraving, being covered with a variety of small fossils including corals and bivalves, among which extremely minute crinoid sections predominate.

It is, perhaps, quite safe to say that the obtuse angle formed by the bowl and stem of this yet unfinished specimen is the result of the workman adapting the form of his pipe to the shape of the stone, and this is such a simple mechanical device that it must have occurred to native pipe-makers long before they ever saw or heard of a white man. The bowl is bored to a depth of five-eighths of an inch, and a mere beginning has been made in making the stem-hole.

For this very excellent specimen, found on lot 6, concession 2, township of Malahide, we are indebted

Fig. 3 (24,833). Full size.  
to our late friend, Mr. R. T. Anderson, whose untimely decease is elsewhere referred to.



Fig. 4 (26,582). Nearly full size.

Fig. 4 has come to us since the general remarks on stone pipes were written. It is of soapstone, was found on the shore of Dalhousie Lake, Lanark county, and is presented to the museum by Dr. T. W. Beeman, to whom we are already indebted for a large quantity of material. The pipe, or rather what was intended to be a pipe, of which fig. 4 is a slightly reduced diagram, falls almost into the class of straight ones—those that are claimed to be of the oldest kind.

Without attempting to say just how old this specimen is, it may be mentioned that the greater portion of the surface has become patinated, and that it bears numerous examples of parallel striae such as it is believed may be the result of rubbing with other and grittier stones. A good example of these may be seen on the stem end of the diagram. The deeply cut line on the same side was plainly enough intended as a guide to the eye in boring the stem-hole. Examples of the guideline are found on some other specimens in the museum where the intention was to bore a long hole.

Fig. 4 is severely plain in design, but shows a good deal of skill in its almost faultless symmetry of workmanship.



Fig. 5 (17,119). 4.5 diameter.

For the purpose of illustrating working methods, it might be difficult to find anything better than the intended pipe, fig. 5. The piece of soapstone may have been selected because of its suggestive shape, or merely on account of the fact that it was soapstone. Judging from the results of attempts to flake on the under side of this stone, the workman resolved to flake no more. He found his inability to regulate the size of his chips, and came perilously near ruining his material. He has done some sawing, therefore, to regulate the extent of the flakes, or, it may have been with the intention of carrying on this operation until such a portion as that which projects in front of the bowl was completely severed, or so nearly so, that it might be broken off with safety.

Having laid out the shape he meant his pipe to be, he feared to strike hard or heavy blows to remove the superfluous material on the upper side of the stem, and there he has notched the stone closely by filing with flint flakes, and then knocking off the weakened portions. The lower edge of the knob in front has been similarly treated.

On the side shown in the engraving several blows have been struck with a somewhat dull-edged stone axe, perhaps by way of testing the hardness of the stone before doing further work on it.

This specimen came from the Crawford farm, near Penetanguishene, and was presented to us by Mr. T. F. Milne, as part of the Milne collection.

#### FINISHED STONE PIPES.

During the past season, the museum acquired a collection made by Mr. W. M. Dick, of Brantford, near the boundary between Brantford and Onondaga townships. From numerous graves on lot 10, concession 3, Onondaga; a considerable number of clay and stone pipes was obtained, and some of the latter are here figured. Of both kinds there is a considerable variety, and many of them represent animal forms wholly, or in part.

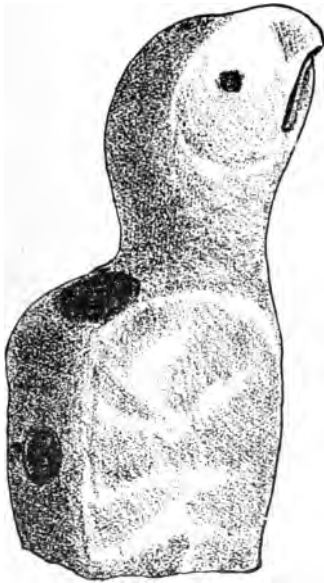


Fig. 6 (25,572).  $\frac{3}{4}$  diameter.

Figure 6 is made from gypsum and represents a bird form. The bowl-hole is small when compared with the size of the pipe, and the stem-hole slopes upwards to meet it. The whole surface of this pipe has been well polished, but the side not shown in the engraving is somewhat weathered. There is another unfinished pipe in the museum made of this kind of stone.

Perhaps the creature intended to be represented on figure 7 is a lizard, but in support of this supposition there are only the elongated body and tail, and the whole may be merely a conventionalized form. The material is steatite of very poor quality, and so far as the workmanship is concerned there is nothing to indicate the use of any but primitive tools. The bowl is a flattened oval, the cavity of which is as smoothly finished as is the outer surface.

Numerous articles of white man's make were found associated with the stone specimens in these Onondaga graves, but unfortunately we now have no means of knowing whether the graves were all of one period, or of different periods, or whether each grave or only some of the graves contained objects of European origin.

Other pipes from the same burial places are illustrated by figures 8, 9 and 10, all of which bear marks that are usually regarded as evidences of European contact. These are of a soft white stone, scarcely any

harder than the indurated clay found near this city and used in the manufacture of coarse terra-cotta work. The origin of this material has long been a source of wonder to some of us, and I have for some time been inclined to regard it as stalagmitic.

Figure 8 has the longest stem of any stone pipe in our possession, its length being eight and a half inches, only about half of which is shown in the engraving. The sectional drawing shows the quadrangular shape of the bowl as seen from above.



Fig. 7 (25,579). Full size.

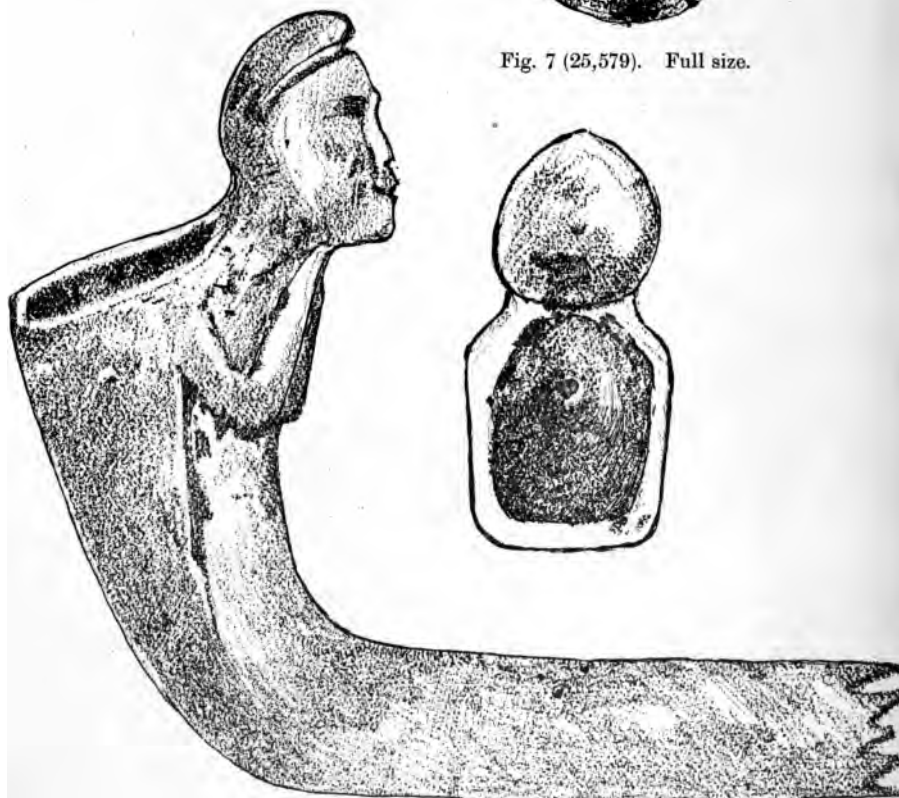


Fig. 8 (25,554). Full size.

Only the head and arms of the carving on this pipe have any human resemblance, and the latter are in a very unusual position, resting upon, or being pressed against the breast. Perhaps the intention was to make the head look as if being supported by the hands, but no hands are shown. The softness of the material may account for their disappearance, had they ever been represented.



Fig. 9 (25,578). Full size.

One seems to see more of the European in figure 9 than in the preceding example. To some extent this may be owing to the head-dress, but a close examination of the workmanship points to a style

of art that is not Indian. This is most clearly observable when a full-face view is taken. Looked at in this way, too, it can be seen that although the workmanship may have been performed subject to white man's influence, the representation is undoubtedly that of some Indian, for, surrounding each eye is a circular arrangement of small dots extending from nose to ear, and from the middle of the forehead to the middle of the cheek, in outline, which, in all probability corresponds to the fashion of face-painting adopted by the owner of the pipe.



Fig. 10 (25,570). Full size.

In figure 10 we see what has represented a bird of some kind. Little more than the wing shown on the engraving remains to testify, to the maker's design, unless it be a few lines indicating feathers at

the extremity of each wing. Imperfect as this specimen is, it would appear to intimate an art ideal somewhat beyond the Indians. In this specimen the stem is unusually short.

Of a very different style is the stone (figure 11) found at Lion's Head, Isthmus Bay, North Bruce. One is often at a loss to identify the kind of bird, or other animal which we see attempts to portray, but in this case it would appear safe to say, "This is an owl." The stone is slate, for the greater part, of a dark rich brown, but on the opposite side from that shown in the picture, a little more than the wing is of a pale, dull green. The workmanship is excellent, and the proportions are very good. The eye holes are bored fully an eighth of an inch in depth—deep enough to form a good seat for the insertion of any other substance to give expression as eyes to the figure, if any such intention existed in the mind of the maker. The end of the tail has either not been finished, or, if finished has been broken off, as it is still in the rough. In most pipes of this kind a hole is bored crosswise, through the feet, but sometimes perpendicularly, between them. A good example of the latter method is found in an owl pipe very much like this one, and which was found in Tiny township. It forms part of the Laidlaw collection. In figure 11, however, we have a compromise hole, the boring having been done perpendicularly from below half way through the projection that forms the feet, and another hole to meet it is bored from the side not shown in the cut. A little below the breast is a well-made line of serrations, the purpose of which is not very evident. The surface of figure 11 is not as highly polished as the surfaces of many stone pipes are, so that the scratches of the rubbing stone are still in evidence, and the word "rubbing stone" is used advisedly, for the reason that only one stone moved over another is capable of leaving such results as are apparent on the surface of this pipe, and this is the more remarkable on account of the fact that there are those who claim pipes of such patterns to be of unmistakable European origin, directly or indirectly.



FIG. 11 (25,098).  $\frac{3}{4}$  diameter.

Notwithstanding the generally bold artistic way in which figure 11 has been worked out, there is not a single feature of it bearing witness to the use of any but primitive appliances.

One of the prettiest little bits of primitive handicraft that we have in the museum is a soapstone pipe, figure 12 (26,604), recently received from Dr. T. W. Beeman. It was found near Dalhousie Lake, Dalhousie township, Lanark County.



Small as this pipe is, the bowl is more capacious than many are of more bulky appearance, as the cavity is seven-eighths of an inch deep, and averages a little more than three-fourths of an inch in diameter. The wall of the bowl has been worked out to such a degree of thinness that portions of it are translucent. The stem-hole is very large—quite three-sixteenths of an inch in diameter. Although drill marks may be traced on the inner side of the bowl, some scooping must have been done afterwards, as the hole is not quite round



FIG. 12 (26,604). Full size.

#### CLAY PIPES.



Fig. 13, (11,179). Full size.



Fig. 14, (11,391). Full size

Figure 13 is of a pipe which ranks among the oddities of Tobacco Nation pipe-makers' workmanship. The craned neck, the simply conventionalized face, and the arrangement of lines and dots—all are unique in their combination on this specimen, while its general appearance is much more graceful than the illustration indicates. As is common, the head faces the stem, a somewhat strange notion on the part of a pipemaker, who, as some assert, was imitating or, was influenced by European examples.

To Messrs. William and David Melville, of Creemore in Nottawasaga township, we are indebted for this excellent specimen.

Perhaps the pipe bowl here figured (Fig 14) deserves notice on account of its originality in design, if it be not too pretentious to speak thus of what seems to be merely an imitation of an exceedingly coarse and knobby branch. The man who made it must have been an

"impressionist," among the Petuns, for, beyond simply trying to show that he could make something, he has put forth no effort to bring out details, or to give his work any finishing touches.

The raw material is tempered with burnt granite or gneiss, as is shown by the particles of quartz, feldspar and mica that appear on the surface, the two former only where there is a fracture.

This pipe formed part of the collection procured from the estate of the late Rev. J. W. Annis, who gathered nearly all his specimens in the northern part of the county of Simcoe.

For comparison with other clay pipes as to style and quality of work figure 15 is a very good example, as the surface has been stained a bright red, the whole of the forehead being yet so colored. The modelling is of the simplest kind, and yet the face is not without expression, which is mainly attributable to the peculiar way by means of which the mouth and eyes are imitated. Several examples of this device have been found in the province. By the method in question a slight depression is made with a bluntly pointed tool, so as to suggest in the one case lips, and the other eyelids. Unfortunately, the cheeks are so much injured that it is impossible to say whether this head was provided with ears. In one specimen, somewhat similar to this, there is not only a poor attempt to imitate ears, but there are holes at the lower ends as if to show where eardrops should hang.

This pipe was found at Price's Corners, Medonte township, North Simcoe, and presented by Mr. T. F. Milne.



Figure 15 (17,135). Full size

#### STONE AXES.

A large number of the stone axes and adzes we find are very roughly made, as if meant merely for work, without any desire on the part of the maker to produce a good or well-finished tool. In some instances it is plain that efforts have been put forth to show the old mechanic's taste and skill, and figure 16 pictures what is the most highly polished object of this kind in the museum. It comes from Elgin county, in the old country of the Neutrals, and from which many objects of unusually excellent workmanship have been procured. The material is of primary rock, very hard, and of a greenish gray color, mottled with spots of a darker shade.

It is astonishing how the belief has spread so currently in this province that all such specimens were used as "skinning stones." Next to arrowheads they are, among Indian relics, by far the most common, and it is absurd to believe that they were employed as the

popular name suggests. They vary in size from two to thirteen or fourteen inches in length, and in weight from a few ounces to five pounds.



Fig. 16 (10,897). Full Size.

It is, therefore, evident that neither the very small nor the very large ones could have been used as skinning tools, and it would seem somewhat difficult to draw the line respecting those that are supposed to have been so employed. There is no doubt at all that a handy stone, of the kind in question, may be used effectively in removing a hide from a slaughtered beast, but so may many other stone objects, and so also may not a few that are made of bone. Butchers find their knife handles answer very well when the strong adhesions have been cut with the blades, but it is quite impossible to give any stone tool of this kind as good a cutting edge as is possible on a piece of flint or chert, and nothing can be more certain than that implements of the latter material were the true skinning stones. Indeed, it is most probable that any arrowhead available was so employed when the occasion demanded.

We have, in the museum, three tools from the New Hebrides, of the same type as those that are so abundant in Ontario and other parts of the world, and fortunately, these are connected with handles just as they are used at the present day by the natives of the islands named. Two of them are fastened adze-

wise to handles which are respectively eighteen and twenty inches long, with an elbow, and the third is inserted in a cleft at the end of a haft three feet in length.

The latter is of symmetrical form; that is, both sides are equally rounded, but the former two are comparatively flat on one side and well rounded on the other, and it is the rounded side that fits against the handle, or which is the nearer to the workman when the tool is in use.

The similarity between tools of this kind, from many parts of the world, is so great that if by any means a number of representative specimens should become mixed, it would be a matter of no small difficulty—indeed, almost an impossibility, to assort them properly.

It may not be out of place to repeat here that throughout Europe specimens of this kind are yet found, and are known as Thunder Stones, the popular belief being that they have fallen from the sky as thunder bolts. Perhaps it is for this reason that we all use the word “bolts” when we speak of a lightning flash, especially when anything is “struck.”\*

#### SLATE KNIVES.

Slate has always been a favorite material with the Indians of Ontario for the making of certain kinds of tools and of what, in our ignorance, we call “ceremonial” objects. Occasionally, we even find an axe or a gouge shaped from it. Tools known as women’s knives are invariably made from slate. These are mainly of two patterns semi-circular, or crescent; and sagittate or arrow shaped. Eskimo women still use tools of the former pattern in the cleaning of fish, and in the dressing of skins. The largest specimen we have of the half-round type, about nine inches long and fully half as wide, was found on the banks of the Madawaska river, and was presented by Mr. Archibald Riddell, of Arnprior. The figures accompanying this note

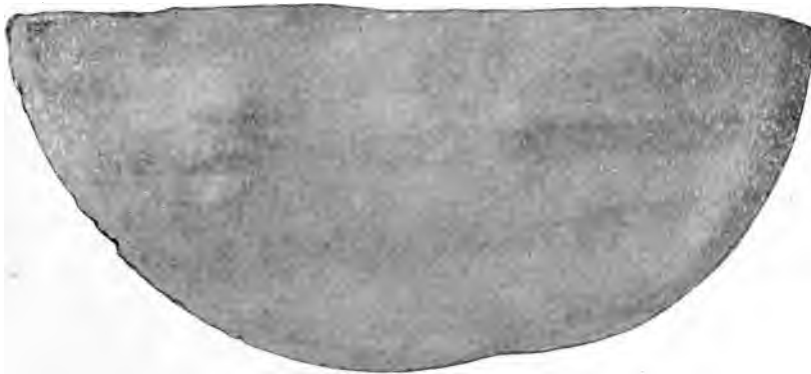


Fig. 17 (17,142). Slightly reduced.

\* Since this was written, Prof. J. Walter Fewkes, of the Smithsonian Institution, has kindly sent me a copy of his Preliminary Report on an Archaeological Trip to the West Indies, from which it appears that the Porto Ricans (mainly of Spanish origin) have inherited this old world notion.

On page 116, Prof. Fewkes says: “The celts are called by the country people ‘thunder-stones’ since they are believed to have fallen from the sky. Almost every household has one or more of these stones, which are thought to afford protection from lightning, or to be efficacious in the treatment of certain bodily disorders. The method employed by the natives to determine whether a stone is a ‘thunder-stone’ is to tie a string about it and put it in the flame of a candle. If the string burns immediately, the stone is not regarded as a true ‘thunder-stone.’”

represent the smallest of their kind in the museum. To most implements of this sort, it is probable that some kind of handle or haft was attached, as we know the Eskimo do with theirs. Figure 17, which is straight-backed, is thinned along that edge as if to allow of the blade being let into a slot in a piece of wood, and figure 18 is quite rough along the corresponding edge as if it, too, was meant to be covered with some sort of handle, unless we regard the specimen as an unfinished one.



Fig. 18 (3,760). Slightly reduced.

Our largest specimen, already mentioned, is so made as to leave the back considerably thicker than the blade, the division being marked off with a decided shoulder, and this thick back may have answered the purpose of a handle.

Another slate knife, but obviously deriving its form from that of the arrowhead is illustrated by means of figure 19, which was found at Rylstone, near the north-east corner of Northumberland County, and presented by Mr. D. Allan. It will be observed that this specimen is not symmetrical, but this is probably accidental rather than intentional, or it may be the result of wear, although we have several examples of small knives showing a decided purpose to make one side rounder than the other, and a few that seem to be intermediate in relation to the half round and arrow-shaped forms, in which only one side has been brought to a cutting edge.

Before the days of specialization, an arrow-head may have served also as a knife, a scraper, a saw, and a drill. At any rate, the various chipped cherts we regard as having been so used seem to carry with them proof to this effect. Figure 20, from the County of Middlesex, Ontario, is (reputedly) a woman's knife in an unfinished state, as the edges are not sharpened, nor is the work on the shank completed.

Smaller specimens of this type are more common, and some have been figured in former reports. In more than thirty examples the edges are, without exception, more or less convex, differing in this respect from figure 20.



Fig. 19 (3,769), Full size.



Fig. 20 (3,778), Full size.

## A SLATE PENDANT.

Of slate also, but for a totally different use is the object figured at 21. It was found at White's farm, South Yarmouth township, county of Elgin, and belongs to the class of object known as "pendants," and as the hole shows considerable signs of wear, the specimen may have been so worn, either by itself, or, as part of a necklace. For all we know it may



Fig 21 (458). Full size.

have been attached to a waist-belt, or have been a portion of dance toggery worn at the knee, or it may have possessed some talismanic reputation as part of a medicine man's outfit; we know not. The probability is that such articles were used as personal decorations in some way, and the ancient workman has apparently taken pains to shape this particular pendant in some conformity with the veining of his raw material, a piece of Huronian slate. When perforated slate specimens, from two to four inches long, come to a point at the lower end, there is good reason to regard them as having been eardrops. On more than one occasion I have found them in Iroquoian, or Huron-Iroquoian graves, so situated in relation to the skull as to make this probable. An excellent pair was found in a mound on Mr. C. A. See's property, on Tidd's Island, River St. Lawrence, some years ago, and we have added others since.

The pendant character of figure 21 may be assumed, not only on account of the hole, but from the fact, that while the maker has been at great pains to obliterate almost every trace of roughness on one side, the other side is much less carefully finished.

It may be noticed here that many more objects made from this striped slate are found in the south-western than in the eastern part of the province.

## STONE GOUGES.

Few stone tools attract more attention than is given to gouges, and when all has been said, it cannot be claimed that we know much

about them. I have no recollection of anything like them being reported outside of North America, and even here they are mainly, if not wholly, found in the valley of the St. Lawrence. Not many of these tools show any evidence that they were used otherwise than directly in the hand, although most of them are made much like the stone axes and adzes, and might have been similarly attached to handles. We have at least two specimens however, respecting which there cannot be a doubt as to their having had handles, or how these handles were fastened to them; and a few others bear marks that may also have been made in connection with some attachment of this kind.

Of about a hundred and fifty in the museum, two-thirds come from the Rideau Valley, in the greater valley of the Ottawa, and most of these differ in form from those found in the western part of old Ontario; the lips, or cutting edges of the former being flatter, and the sides somewhat shouldered as compared with more deeply and widely rounded hollows of western forms. Figure 22 illustrates one of the eastern type found near Lake Temagaming. It is of argillite, as many gouges are, and besides having the characteristic shallow and shouldered lip, is sharpened at the opposite end like an axe.

This quite uncommon form was found near Temagaming Lake in Nipissing District, and came to us through Mr. Aubrey White, Deputy Commissioner of Crown Lands.

The one shown by figure 23 is much smaller, and, in some respects, more accurately worked. It is from a section that has yielded nothing of the kind previously, and is interesting for this reason. For it we are indebted to Mr. Frederick Birch, of Wodehouse. The portion of the face above the hollow is quite flat, while



Fig. 22 (19,831).  $\frac{3}{4}$  diameter.



the back is rounded ; this, added to the fact that the head has been left rough, suggests that the tool was not used directly in the hand.

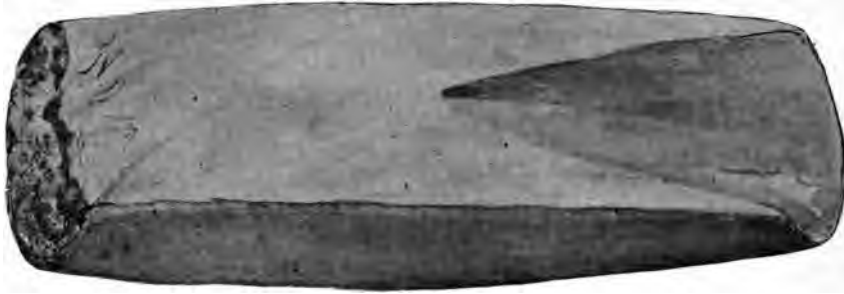


Fig. 23 (26,151). Full size.

Figure 24 illustrates the smallest gouge in the museum, but the engraving does not well bring out the hollow which extends from end to end of the specimen. The edge is ground to a chisel point. This very small tool comes from near Port Maitland, in Haldimand county.



Fig. 24 (17,204). Full size.

The tool (5,088), of which figure 25 is a diagram, was found by Mr. A. McCoy, in Drummond township, Lanark county, and is of the eastern Ontario type, but much flatter than most tools of this kind are. Indeed, it is nothing more than a small slab of slate, roughly rounded on the two long edges, and very slightly hollowed to form a cutting lip. Some of the scratches on the side shown are of recent origin, perhaps the result of using the stone as a hone, but the star-like arrangement of lines at the upper end, although seemingly much older, still have a modern appearance, the accuracy with which they are made indicating the use of a ruler or straight edge on the part of the man who made them.

The only use that suggests itself in connection with tools of this kind is, that of removing the charred wood from the inside



Fig. 25 (5,088). Full size.

of dug-out canoes, or for a similar purpose in the making of wooden bowls. For the former use, a tool like figure 22 would answer very well, while one like figure 23 would serve admirably even when held directly in the hand, for the cutting away of charcoal from any small wooden vessel in process of making.

Nobody has yet suggested or insisted that the Indian never thought of such a tool until he had seen one in the hands of a French carpenter, but there is yet time, to show how utterly foreign the curved lip, and the whole idea of *gouging* are to the aboriginal imagination. It may readily be proved that half-round steel files were absolutely necessary to form the hollow!

Figure 26 is of a somewhat peculiar specimen on account of its having been degraded, or subjected to a secondary treatment, by which means a large por-



Fig. 26 (5,067). Half diameter.

tion of the hollow has been ground away not only at the lip, but for fully two inches back, as the cut shows. In its present form it was no doubt a very effective cutting tool, when attached to a handle, as the pecked hollow on the rounded side shows to have been the case. The gouge was found at McDonald's Corners, on Rideau Lake, by Mr. W. Dunlop, from whom it came to the Provincial Museum per Dr. T. W. Beeman, of Perth.

#### PEBBLE GORGET.

Figures 27 and 28 are cuts of a somewhat peculiar piece of Indian work, found near Clarksburg, Collingwood township, county of Grey, and comes to us from Mr. Frederick Birch, of Wodehouse. It belongs to the class we call gorgets, although we are yet without any satisfactory reasons for so naming them. As has more than once been mentioned in our reports there was no regulation pattern for them—in a general way, they resemble one another, but the size and form were regulated mainly by the possibilities of the bit of slate or other stone in the workman's hands; indeed, it may be said that the shape of almost every primitive artifact is, to some extent, the result of such a condition.

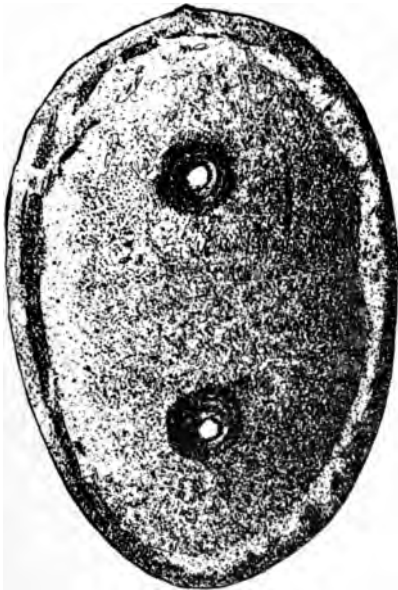


Fig. 27 (26,578). Full size.

It has frequently been observed that the savage was not at all

slow in perceiving how the natural shape of a stone might be utilized and every museum contains examples of various kinds of tools and other articles, the idea of making which has been suggested in this way.

Figure 27 (26,578) is a very good example of this kind. Notwithstanding much that is artificial-looking about this specimen, besides the holes, it is of purely adventitious form. A well marked collar or flange borders the stone, as may be seen by figure 28, which shows a cross section. The holes are deeply countersunk, on each side.

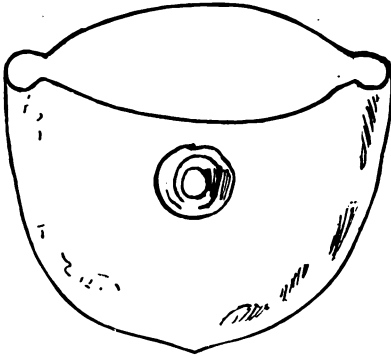


Fig. 28 (26,578).

#### HOW THE INDIAN MENDED STONE.

Figures 29 and 30 illustrate very clearly an aboriginal device for holding together parts, of what we may suppose to have been valuable articles.

In figure 29 one of the holes seems to go through the crack in the specimen, but this is only in appearance, as the fracture extends obliquely to the left, almost to the edge of the other hole on the opposite side.

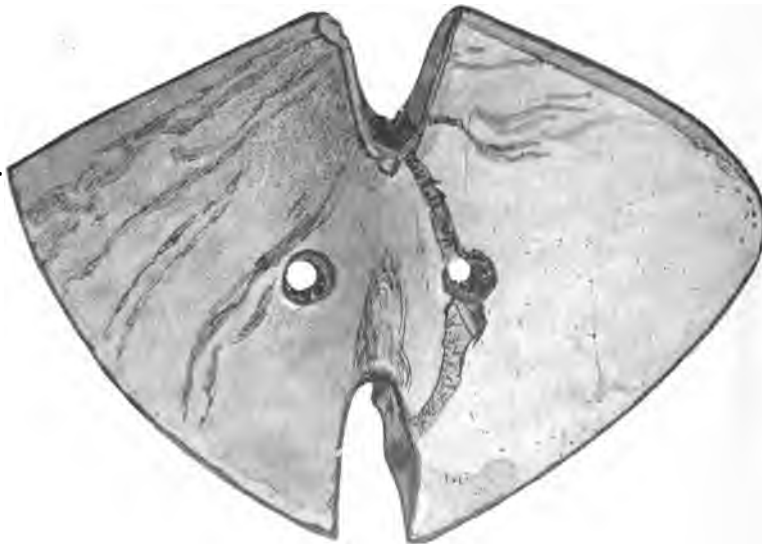


Fig. 29 (2,004).

We may surmise that the portions were bound together by means of a thong, probably of rawhide in a moist condition, so that when it dried the parts were drawn tightly together.

Be this as it may, the holes were for repairing or fastening purposes, just as is sometimes exemplified on pottery. Figures 29 and 30 have been chosen for illustration, because, so far as records show, there is not a single early reference in print to such objects which, perhaps, pertained to people preceding those we know anything about.



Fig. 30 (12,803).

#### STONE FILES OR STEEL FILES.

In much that has recently been written with respect to European influence on Indian handiwork, a good deal of dependence has been placed upon what were regarded as undoubted proofs that steel files and drills were used. Mainly, or largely on this supposition, the claim is maintained that numerous objects of good, bad and indifferent workmanship, hitherto assigned to purely Indian origin are nothing of the sort. As this matter is referred to elsewhere, in the present report, the purpose here is merely to examine briefly from a mechanic's point of view, what truth there is in so-called steel file evidence, as this is found on stone pipes and other articles usually called "Indian."

It is taken for granted by those who discover so much that has been produced by means of white man's appliances, that the deeply cut rings seen in stone borings, and the parallel striæ observed on polished surfaces of stone are necessarily the result of steel tools having been employed. Confessedly, at first sight, such reasoning would appear to be correct, but in practice the results do not correspond with this conclusion, for it is quite easy to get from a steel file on a smooth surface, lines or scratches which are not at all parallel, and it is equally possible to produce tolerably parallel lines by the use of a stone file.



Fig. 31. (Enlarged.)

Every mechanic who has been taught to use a file properly, knows how difficult it is to overcome tendencies to the rocking and wobbling of his instrument—motions that give very unsatisfactory results, and tend to leave very confused striæ; whereas the steady motion of a gritty stone over the surface of a softer one will produce scratches with a parallelism that is surprising until one begins to reason the matter thus:—The most effective points in a stone file are the hardest and highest, or most prominent particles, which are usually of silicious character, and these, although occurring irregularly, produce marks quite straight and parallel, although not so sharp or so deep as if made with a steel tool, because the grains or particles often break down before the stroke, or push, or pull is completed, and as other grains are thus brought into play, the striæ are also less distinctly continuous.

During the last twenty or twenty-five years I have, at intervals, and as opportunity served or required, made experiments with metallic and mineral files on limestone, slate and soapstone, the kinds of material from which the Indian produced nearly all his finer specimens of work—that which, it is now claimed, he could not have accomplished without direct or indirect European aid, and I have found that when looking over the experimental pieces after the lapse of a few months, and when I had forgotten which was which, it was often difficult, if not impossible, to distinguish those that had been treated with a Sheffield “Sorby” from those that had been rubbed, stone on stone.

For this and other reasons it was thought desirable for the present report to take another piece of stone and do similar work on it anew. For this purpose a bit of hard, dark-grey, fossiliferous (probably Trenton) limestone was chosen, partly on account of its shape, from a heap of building material lying on the Education Department grounds. The rougher prominences were reduced with the assistance of a grindstone. With a fairly good file, borrowed from our carpenter, the results were as they appear at the top of figure 31. On the two lower portions a piece of coarse red sandstone was used.

The marks resulting from the steel tool are undoubtedly deeper, sharper, and more continuously parallel than are those made by the stone tool, but the statement is here ventured that the general appearance of the surface marked by the stone tool, especially in the middle portion of the limestone, so strongly resembles the work of the steel file as almost “to deceive the very elect.”

The results from a new file are not so good as those from one somewhat worn, because the most delicate points of the hard metal break when brought into contact with the stone much more readily than if rubbed over iron, and the results are more like the work of the sandstone tool on the middle and lower parts of the limestone in the figure.

#### SOME MECHANICAL METHODS.

There seems to be a disposition of late, on the part of certain American archæologists, to regard the prehistoric Indian as a being of extremely low intelligence—only a few degrees, indeed, superior to some of the lower animals. It is conceded that he lived, and that he was exceedingly cruel, that he delighted in war, that in a very crude way he managed to produce a few weapons and utensils, but really was of little or no account as an artificer until after he came into contact with white men. By implication it is taught that not only was warfare chronic, but that every man engaged in it; that for a change he did something by way of hunting and fishing, simply that he might live; and that grossly superstitious as he was—as all savages are, and many who are not, even now—he lived the lowest kind of life, without inventiveness, or other kind of originality, and was utterly deficient in art instinct.

Ethnologically, however, we learn that he was a tolerably high type of savage. He possessed a considerable share of imagination—he peopled his universe with good and bad spirits, as well as with a multitude that were neither one nor the other—he attributed reason to everything having animal life—he feasted and gambled for divination purposes, if not for those of a worshipful kind—he loved finery—was given to bravado, and fond of story-telling—liked to make speeches—was extremely hospitable, and lived up to his tribal code of honor. From this unembellished statement of fact, it is easily deducible that he *was* somewhat originaive, which does not mean that every one was gifted with originality, any more than it would be true to say that every one of our superior selves is so blessed, or cursed, but it does signify that notwithstanding the simplicity of aboriginal tastes, and the rudeness of primitive society conditions, notions were “abroad,” and that here and there among the people real novelties arose from time to time. During the historic period we have had numerous notable examples of Indian intelligence in different departments of business life, and it can scarcely be that “no man of parts” appeared during prehistoric times.

Wherever he came from, he brought the knowledge of how to make a stone tomahawk and a stone arrow, we know not how much more; but we do know, that adapting himself to his surroundings he produced many other things that ministered to his wants, and that he was far from being too hide-bound in the matter of custom to refuse the adoption of what was novel, as far at any rate as his limited intelligence would permit, and it is exactly in this relation that even civilized races stand to their environment to-day. It is a question of degree, not of kind. But, in admitting that as a rule his wants were limited in accordance with his ideas, and his ideas in correspondence with his wants, we are not bound to conclude that either mentally or otherwise his condition was stereotyped. The archæology of the Atlantic slope, to mention no other area, points to a very different conclusion, for here we find many samples of workmanship that differ totally from those found in any other part of the continent, or of the world. Some aboriginal genius must have cropped out now and again in æsthetic as well as in mechanic art. Our old savage knew what he wanted to make, and he knew, too, just the kind of material best suited for his purpose. With intelligence far beyond that of the eolithic stage, his eye was quick to seize upon any natural or adventitious form in wood, bone, or stone from which to produce desired results with the least amount of labor, and that his reasoning power exceeded that of paleolithic man, we have evidence to show in every private or public collection.

In Figure 32 we have an example of what may be called his adaptiveness. Here was a waterworn pebble with some resemblance to an axe, but it was lacking in symmetry. By means of persistent pecking with sharp and heavy fragments of harder stones the pebble has been reduced to something like the desired shape. The side shown in the illustration required fully twice as much work as the other side did, and consequently the waterworn polish is better exemplified on the opposite surface.

The excellent specimen of which figure 32 is a diagram, was presented to the Provincial Museum by Mr. Hugh Nichol, of Stratford, Ont.

Another of a similar kind is represented by figure 33. For

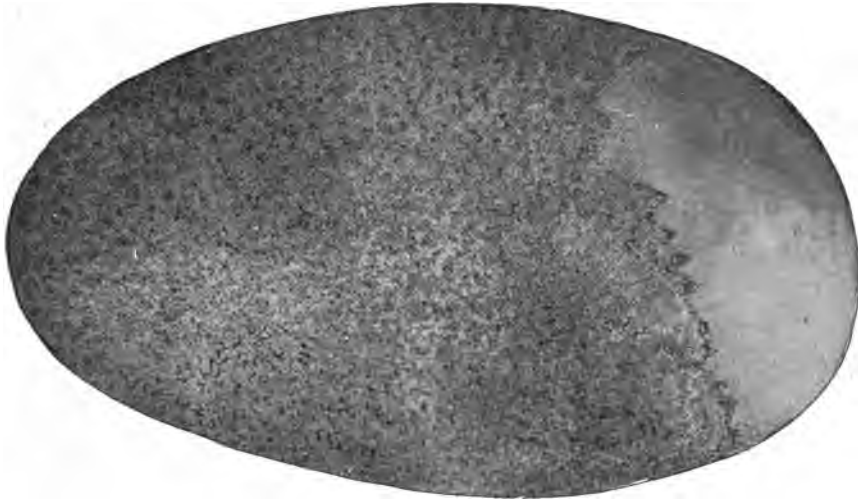


Fig. 32 (5,438).  $\frac{3}{4}$  diameter.

this example of pecking merely to remove a hump from what was also probably meant to be an axe, we are indebted to our very good friend Dr. T. E. Craig, now of Manchester, but formerly of Lawrenceburg, Indiana, near which city the original of figure 33 was found.

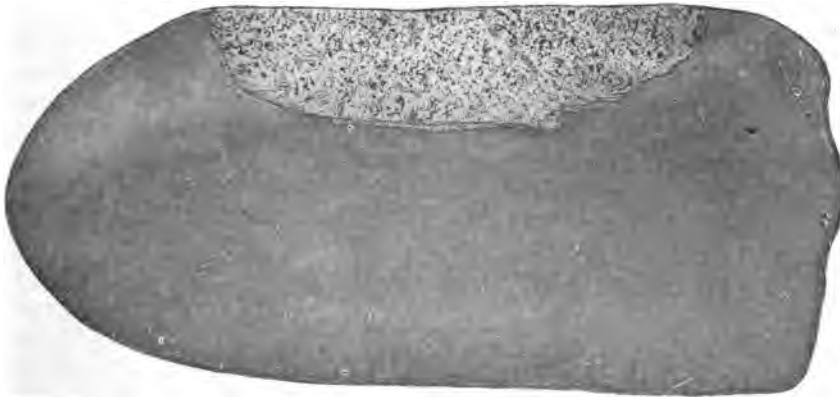


Figure 33 (5,436).  $\frac{3}{4}$  diameter.

In Figure 34 we have an illustration of another way in which reduction in size was effected. The stone was first slightly pitted on each side, near the middle, so as to be easily grasped between the



thumb and middle finger ; sometimes the pitting seems to have been the result of using the stone first as a chipping-block. In either case, when it was afterwards used as a hammer the points of percussion would naturally be those which were most prominent. In this way a double purpose was accomplished, as also was the case when the pitting was the result of usage as a block. Some one (probably the late Mr. Frank H. Cushing) has suggested that discoidal stones were thus evolved.



Figure 34 (12,427).  $\frac{3}{4}$  diameter.

Figure 34 came to us from Pennsylvania, through the U. S. National Museum.

Figure 33 is drawn a little more than half the diameter of a specimen which is a puzzle in methods. The material is argillite, and the object itself was found near Lombardy, Leeds county, a district that has yielded an unusually large quantity of valuable relics, most of which are now, thanks to Dr. T. W. Beeman, in the Provincial Museum.

Three sides of figure 35 have, one would suppose, been dressed. The one on which it rests, when looked at horizontally with the upper end to the right, is partly polished, while the unpolished portions look as if they had been treated with a saw, but the apparent saw-marks are rather what one would expect to see on wood. Marks of a similar kind, but even more distinct, are seen near the lower end of the diagram. On the shaded part, too, marks of this sort occur, but as the stone is slightly concave here, crosswise, it is quite evident that no tool of the saw kind, whether of stone or of metal, could have been employed ; yet it is not easy to account for the regularity of the marks as a result of weathering, especially as they in no wise correspond with the terminations of the layers that characterize argillaceous rock. The likelihood is that the marks are the result of glacial action.



Fig. 35 (5,487).  $\frac{1}{2}$  diameter.



Fig. 36 (5,439). 7-12 diameter.

Evidences of these layers appear in the slightly curved diagonal lines on the right side of the illustration, and should be marked again on the opposite side, not on the side shown to the left.

In cross section this unfinished tool is rhomboidal.

Perhaps the specimen is simply an adventitious splinter of rock, the regularity of whose appearance has suggested the practicability of modifying it into a chisel similar to a few well finished examples we already have in the museum.

The specimen here figured (figure 36) is not only our largest example of chipping in the rough, but is one of the few examples we have of any attempt to make an implement from Utica slate, or shale, a kind of material one would regard as not being at all adapted for such a purpose. In the catalogue entry of this specimen, as recorded Nov. 7th, 1891, are the words "roughly sawn and chipped slate axe," from which it appears that I regarded the diagonal, parallel, and somewhat deeply cut lines as resulting from the use of some sort of saw. I am now quite sure that these were not made in any such way, but are more like glacial striæ, as these may be seen sometimes where there is an outcrop of this formation. For it is noticeable, that soft as slate and limestone are in comparison with granite, diorite and other primary rocks, the ancient ice-marks can often be traced on their surfaces when there is not a vestige on the others, or, when, at all events, those on the latter are far less sharply marked. The marks also on pieces like this and figure 35 go to show that the material was taken from some surface exposure.

That the chipping is the result of handiwork there cannot be a doubt, but it is far from easy to surmise what possible use was intended for this tool. Apart from the frangibility of the stone, this piece is very much thinner on one side than on the other, in addition to which its very thinness gives a strong curve to the under side (as the diagram stands) thus rendering it difficult to understand how the finished implement could be put to any effective use. Not a tap has been made on the surface by way of pecking, and there is still some work that might have been done by means of flaking. It is twelve inches long, four inches broad, and averages an inch in thickness.

As a study of early man's workmanship, this specimen is one of the best in the museum. It was found on Rideau Lake, and was presented by Dr. T. W. Beeman.

Another very good example of rough chipping, and that, too, on stone of soft, argillaceous quality, is illustrated by figure 37 from near Carlisle, Ancaster township, in the County of Wentworth. It is not as long as the last described specimen, being only ten inches from end to end, but its width and thickness are respectively four and a half inches, and one and three-eighth inches.

The material lent itself admirably to flaking, and some of the spawls must have been very large; the scar of one measures fully ten square inches.

The style of notching in this specimen as well as in the one from Rideau Lake is restricted to Ontario and contiguous territory. Our Indians made the handle-grooves, wide, shallow, and all round the axe, or sometimes merely notched the edges, and almost invariably used

thinner pieces of stone than were chosen by more southern peoples, who grooved two sides and only one edge of their axes, performing the work, too, in a much superior way. It may also be noticed that in the latter the transversely, ungrooved edge is frequently grooved

slightly lengthwise, the intention being, as some suppose, to provide a good seat or bed for holding a wedge to tighten the head in its haft.

The unfinished specimen, two sides of which are here figured full size, (figs. 36 and 37) comes from the township of Humberstone, Welland county, where it was found by Mr. Cyrenius Bearss, to whom the museum is deeply indebted for numerous gifts.

This piece of stone is almost jet black and nearly seven inches long, but of uncertain quality. Edgewise it is a little more than three-fourths of an inch in thickness, the sides being nearly parallel, but one much wider than the other. The remaining sides are irregular in outline. A have been more or less rubbed down to smoothness, most of the work having been done on the parallel



Fig. 37 (17,255) 3-5 diameter.

sides, and considerably more on the wide side than on the narrow one. Faint traces of parallelism in the striæ appear here and there, but nothing at all suggestive of a steel file.



Fig. 38 (1,531). Full size.



Fig. 39 (1,531). Full size.

It is quite impossible to say just what this stone was intended to be when the work was finished, but whatever the purpose may have been, it was thought necessary that the sides should be straight. The one shown by figure 38 is already as nearly so as a plane could produce on a piece of wood. But the most striking feature of this specimen, and the one on account of which any attention is now paid to it, is the presence of a well marked line on each of the parallel and well smoothed sides, for the plain purpose of guiding the workman in bringing his material to the proper shape and size.

On one side (figure 38) the surface is so well rubbed down that traces of the line have almost disappeared, (they are much less distinct than as shown on the engraving) but on the side (figure 39) the line is still measureably deep, in some places not less than a thirty-second of an inch. In accordance with European methods, the workman would have simply scratched a line on the surface, or, desiring it deeper, would have cut it continuously with a sharp chisel, but this line is very roughly pecked, as if done by means of some sharp-pointed tool following a flint saw mark. Now, if an Indian laid out his work even in this simple way, it indicates the application of mechanical methods where we have been led to believe that only the "rule of thumb" prevailed.



Fig. 40 (5,433). Full size.

We are as much as ever in the dark regarding the use of such tablets as figure 40, and which, by a tacit understanding have come to be known as "gorgets." In this province, nine-tenths or even a larger proportion of them, are made of slate, and as has been remarked on some former occasions, no two are formed alike. Among some hundreds we have only another specimen with four concave edges. It is not, however, on account of its shape that it has been chosen for illustration, but because of the condition in which the surface is, as a result of accidental flaking. Its appearance conveys the impression that during the boring process large pieces had scaled off, in consequence of which, the workman rejected it as being too thin for his purpose. In

an ordinary case, the stone might have been rubbed down into shape but on account of a wist in the material, such an operation could not have been successfully carried out, and the workman evidently discarded the piece altogether.

No attempt whatever has been made to bore from the opposite side, which has been rubbed, but not polished, as many gorgets are.

Parallel striæ, on hollow parts of the fracture evidently made before it was determined to throw up the job, follow undulations in a way that by no possibility could have resulted from the use of a file.\*

#### BONE AND HORN.

The largest bone awl in the museum is represented by fig. 41. It was found in the county of Ontario, by Mr. H. Pascoe, measures eleven and a half inches in length, and is well proportioned. Probably it was made from the leg bone of a deer, from which the piece has been sawn.

Tools of this kind must have been used in heavy work, such as perforating sheets of bark for wigwams, canoes and buckets. It is not at all unlikely that there were other uses to which these so-called awls, or needles were applied, more especially the smaller ones. They may have been used as pins, or skewers, either for fastening clothing to the body, for keeping open or shut what served as doors to the skin and bark wigwams, or the women may have employed them in making the necessary attachments for carrying their papooses.

In former reports, specimens of the smaller kinds have been described and figured, of ornamental shapes, and bearing incised, decorative patterns.

A very fine specimen, only an inch shorter than fig. 41, and highly ornamented with straight lines, was found on lot 5, west half of concession 2, township of Bexley, and is in the Laidlaw collection.

\* "Amongst the earth which we cleared out of this chamber we found quantities of ivory, fragments of circular boxes, limbs, the hoof of a bull on a pedestal, fragments of utensils, and tablets with holes through them, probably for suspension."

From an article by J. Theodore Bent, in the *London Athenæum*, for July 6, 1889, on The Mounds of Bahrein. (The Bahrein Islands form a small group off the Arabian Coast, in the Persian Gulf). Similar tablets are found in Great Britain.



Figs 41 (25,155).  
 $\frac{3}{4}$  diameter.

Fig. 42 is not a very good drawing of what appears to be an abortive form of antler, the hole in which suggests that it was intended to be what is called an arrow-straightener, that is, a kind of "pinch" through which the shaft was pushed until it came to a bent or curved place, when the tool was used lever-like to bring it into line. Something of the same kind now, or until recently, used by some Indians in California lends color to the probability of this theory.

Perhaps the aboriginal eye caught the peculiarities of this antler—peculiarities that do not come out well in the cut, for it seems to have grown in an odd sort of independent way from the base of the main antler, a portion of which may yet be seen on the side of the specimen not shown in the diagram.



Fig. 42 (25,511). Full size.

The holes in such specimens are generally at an angle, perhaps as a result of the way in which the tool was used, the pressure and consequent friction wearing away two diagonally opposite sides,—one above and one below. As this tool does not possess the peculiarity in question, perhaps it had not been much used. It is from the Miller farm, Onondaga township.

The phalangeal bone here figured is from the Purdy farm, lot 5, concession 3, Brantford township. Bones of this kind, probably of the common deer are frequently found in ash-heaps connected with old village sites. Occasionally they show no signs whatever of work-



manship, but in other cases burnt marks appear on the ridge of the rounded or front surface. Marks so made are simply short bars extending crosswise, and vary in number from one to five or six, leading to the supposition that the bones were used in some kind of game—perhaps shaken and thrown as dice, or in some such way as the peach-stone or plum-stone game is now played among the Iroquois, namely, in a shallow wooden bowl as is described on pp. 126-8 in the Ontario Archæological Report for 1898.

Bones of this kind are occasionally found with the flat side rubbed smoothly down as is shown by figure 44.

Fig. 43, however, differs from those on which bars have been burnt, in having the cross lines cut with some sharp tool, and in having no fewer than eight marks along the ridge, and quite as many on each of the two sides, although the arrangement is much more irregular on one side (the shaded side in the cut) than on the other. The whole appearance of this specimen is suggestive of its having been used as a tally, or counter, rather than as a die.

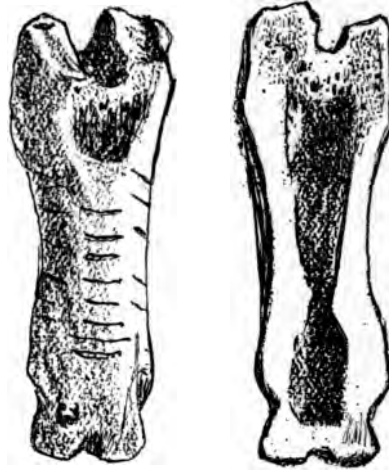


Fig. 43 (25,532). Full size. Fig. 44.

#### WHO MADE THE BONE COMBS.

Among people of almost every degree from the savage upwards the hair has been an object of solicitude as well as of pride. A volume might be written on its treatment in accordance with tribal and national methods. In the very lowest conditions of human society we may take it for granted that the fingers alone were employed for disentangling the locks, and for the removal of foreign substances and vermin. In more advanced conditions these operations were performed mutually as a matter of friendship, of ceremony, or, of necessity. Perhaps a thorn, a pointed stick, or a splinter of bone was found useful in "redding" the hair, and it may be that this usage, or the employment of two or more such objects in a bundle, gave rise to the idea of a comb, if, indeed, the suggestion did not come from the fingers themselves. However this may have been we find combs of wood, of horn, or of shell among primitive peoples in one part or another of the world.\* Some of the shell combs with comparatively broad, triangular or saw-like teeth, may have been employed to press the woof in primitive looms, as the Navaho women do at the present time with coarse wooden instruments. Although it is probable that the combs were made by the men, it is equally probable that they were mostly

\*In the Provincial Museum we have samples of bamboo combs from the New Hebrides, one has only two prongs, and one has seven. These are somewhat clumsily made from the solid; but from Loango, West Africa, are specimens having as many as fifteen prongs, or teeth, each of which is an independent slip of bamboo; and all are bound very artistically to form a complete implement.

used by the women. It is asserted that no Indian ever used a comb, and therefore never made one, until he got the idea from white people! and in evidence of this, reference has been made to the human and other animal figures that are carved on many of the specimens.

In the State of New York a larger number and a greater variety of bone combs have been found than in Ontario. In Bulletin 50 (March, 1902) p. 284, Dr. W. M. Beauchamp describes and figures about twenty objects of this kind. In his opening remarks he says:—"The Indian use of bone combs seems not very old, and yet is prehistoric in a sense. Most of those found are of the seventeenth century, but some seem a few years earlier, suggesting a knowledge of Europeans without direct contact. The early ones are very simple in design, and with few but strong and large teeth. They are almost entirely confined to Iroquois sites, or those classed with them." On the previous page he says, "Artistic results in bone carving could hardly be expected before the Indians had metallic tools. So, when a well worked face or head appears, it is natural to infer the use of these, on what seem prehistoric sites." I am extremely sorry to differ from Dr. Beauchamp in his conclusions. There can scarcely be doubt that European contact and the use of metallic tools exerted strong modifying influences on old time, Indian mechanical methods. We cannot suppose anything more reasonable than this. It has always, and everywhere been so, under similar conditions. The Black Fellow of Australia could, and did, make a better boomerang with a Sheffield "thwittle" than by means of only a few bits of stone and shell. The Maori was able to produce a carved war-club, or paddle, with much less difficulty after he procured one or two steel tools than when he was confined to the use of obsidian or jade chips. The Fijian with a saw and a chisel made ten beautifully carved bludgeons in less time than it took him to make one in the old way. The West African negro to-day executes marvellous designs on elephants' tusks much more quickly than he could when his blade was only a bit of native-made iron; and the Indians of British Columbia carved immense canoes and totem-posts more quickly after Vancouver left them a kit of carpenter's tools. But boomerangs, and carved war-clubs, and paddles, and elephant tusks, and totem-posts did not owe their origin as implements or as works of art to European contact; indeed, when a comparison of results arising from old and new methods is made, it is not seldom to the disadvantage of the latter. Why, then, do we hear so much about "European influence" in this part of America in connection with any object of hitherto supposedly Indian origin, which shows the least evidence of superiority in workmanship, while we have no difficulty in conceding a large amount of innate mechanical and artistic genius to peoples afar off? Does it ever occur to those who attribute so little credit to our Iroquois and other eastern Indians to wonder why they should have proved such apt pupils as imitators and modifiers of European models, and yet be totally unable to originate a single idea beyond the most commonplace, apart from outside inspiration.

It is not quite easy to decide just where Dr. Beauchamp would place bone combs in point of time. "The Indian use" of them, he says, "seems not very old, and yet is prehistoric in a sense." What

this "sense" is we gather from the following sentence, which states that although most of the comb specimens found are of the seventeenth century, "some seem a few years earlier, suggesting a knowledge of Europeans without direct contact." This looks like a case of special pleading. It might be difficult to find a more painstaking and conscientious worker than Dr. Beauchamp, but here he shows extreme reluctance to credit the prehistoric Indian with intelligence enough to produce so simple a thing as is suggested by one's fingers, while at the same time the whole case is given away in the statement that "the early ones are very simple in design, and with few but strong and large teeth." This is the very kind we would expect to find. An object with fewer than three teeth we might hesitate to call a comb. Dr. Beauchamp figures six of what are presumably the earliest forms, all of which, probably—five, certainly—had originally four teeth. Is there here any confirmation of the idea that the hand may have suggested the comb? In any event it would not seem to have been at all necessary for the Indian to wait for centuries combless, only to find out how desirable a thing a comb was by learning in some way that Europeans used combs.

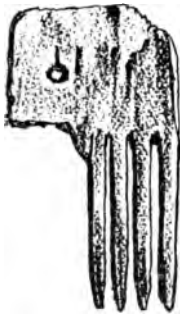


Fig. 45. (25,486). Full size.

There can be little doubt that after European combs became known to the Indians, some changes in pattern resulted, but it would be of interest to many of us to know whether combs were imported very largely for Indian traffic, and what the prevailing patterns were which exerted so powerful an influence on the native fashion. Again, if combs were employed in the inference be

that the use of them was previously established among the natives either for ornament or for use?

It would seem also as if we were unwilling to believe in the likelihood, or even the possibility of excellent work being accomplished without the use of metallic tools, notwithstanding what is known as to the expertness of many savage folk who were entirely confined to the use of only the most primitive appliances.

The specimens here illustrated came from what is known as the Walker and Sealey farm in Onondaga township, and were found by



Fig. 46. (25,482).

\* Figures 186 and 187, plate 18, and 196, 198, 199, and 200, plate 20, in "Horn and Bone Implements." It may be merely a coincidence that three coarsely made, and apparently old, combs in the Ont. Prov. Museum have had eight teeth each: two hands?

Mr. Walter M. Dick, of Brantford. Figures 45 and 46 are apparently of an earlier date than are those represented by figures 47, 48, 49, 50 and 51. They are not of the earliest type figured by Dr. Beauchamp, and which in our cases are exemplified by figures 588, 589, 590 and 8,071, all from the same locality as those figured in this report.

Figure 45 is very small. It probably had ten or twelve teeth if we may judge from the position of the suspensory hole. The teeth are very well finished, so well, indeed, that one might very readily suspect the use of metal tools.

A similar statement as to means of production might be made regarding every other specimen having enough of the teeth left for examination. The cuts appear to be so cleanly, and in some cases, so closely made as at first to suggest the use of a fine saw, or of a file, but when examined from a mechanical standpoint, one can see that neither of these tools could have been employed. A file would have



Fig. 47. (25,481). Full size.

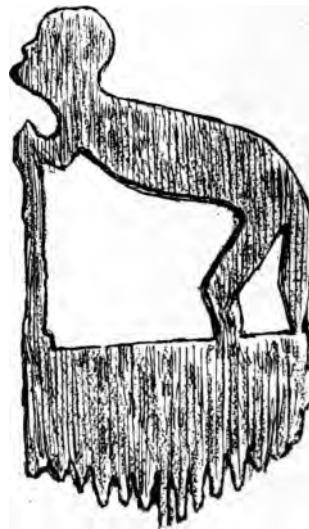


Fig. 48. (25,483). Full size.

separated the teeth at the very point only, and produced at the same time, a cut extending far beyond the intended head, or base of the tooth, while a saw would have left traces of its work in the squareness at the termination of the cut. Next to a thin, sharp flake or blade of flint, or of chert, a good jack-knife would prove most effective in the making of teeth in a bit of bone, and it may be that this handy pocket instrument found its way among the "red-skins" at a very early period. Apart from the teeth, the carving on figures 47, 48, 49 and 50 might have been done by means of a good "Jacques de Liege," or as it was once called in Scotland, a "jocteleg."

Unfinished specimens are nearly always of great value in affording hints or clues with respect to working methods, and among the

combs in this find we are fortunate enough to have one barely half made, figure 51. The bone which is about three-sixteenths of an inch thick, and slightly curved in cross section, is sharply shouldered down, about an inch and a quarter from one end, for the toothed portion, which is thus reduced to barely three lines in thickness. On the side not shown in the engraving all the teeth are cut down to the proper depth, but as may be seen, the work is incomplete on the side shown in the diagram. On account of the shoulders already

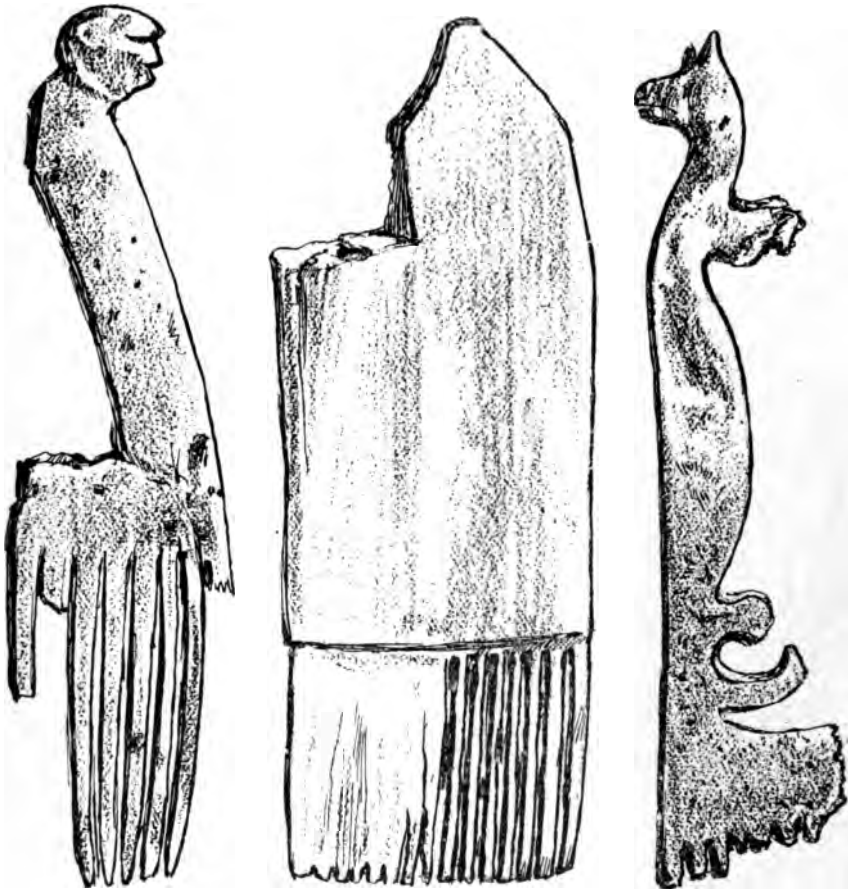


Fig. 49. (25,484). Full size. Fig. 51. (25,480). Full size. Fig. 50. (25,485). Full size.

mentioned at the base of the toothed portion, it was impossible to use a file, and the unfinished work shows that no saw had been employed. The work is rudely enough done to have been performed with "flints," but a steel knife was probably used. The appearance of the cutting at the shoulders would also lead to the supposition that such a tool was employed, but this only goes to prove that the makers of these combs simply availed themselves of a white man's appliance to produce articles of this kind more readily, and, perhaps more accurately, than they had been able to do in the old fashioned way ;

and it would seem somewhat extraordinary to conclude that the Indian took to the making of combs simply because he had procured a white man's knife.

Having sent a copy of these notes on bone combs to the Rev. Dr. W. M. Beauchamp, he has kindly responded in vindication of his opinions as expressed in Bulletin 50. As he says we "want facts only" and I am not at all anxious to maintain any attitude in opposition to them. The discussion may lead to good results. In any event, great weight should be attached to statements from such an excellent authority as he is. Dr. Beauchamp's reply follows this.

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BONE COMBS—A REPLY.

*By Rev. Dr. W. M. Beauchamp.*

I am glad you sent me your notes, for I would not like to go on your record as one who uses "special pleadings." I shall stand by my words, "not very o'd, and yet is prehistoric in a sense." Also, that (of the 17th century) "some seem a few years earlier, suggesting a knowledge of Europeans without direct contact." This is literally true. For example, the "Atwell site," from which fig. 199\* came, was occupied about 1600, partly determined by connection of relics. From this came the bone fish-hook, fig. 214, decidedly a white man's pattern. On the same site I dug up a polished shell bead, undoubtedly made with metallic tools. From the same site as reported I figured, but only mentioned p. 185, "a plain double comb," but doubted the location. This was certainly made with metallic tools. I have recently figured aboriginal combs from the same place. This site is "prehistoric in a sense," no European articles having been found, though its approximate age is clear. Its pottery, etc., closely connect it with the site near by (about three miles), where fig. 196 was found, much like the last. This site has abundant European articles. While one site is clearly on the 17th century, the other may be a few years earlier. No earlier combs have been found in Onondaga county.

In Montgomery county (Mohawk sites) no very early combs have been found; all are of the 17th century. Fig. 187 is "from a recent Mohawk grave" having European articles.

Fig. 198, from Hemlock lake, I judge to be of the 17th century from the character of the clay pipe and bone ornament found with it. I had only a photograph of these.

The crucial test may be in Jefferson county, near Watertown, easily influenced by French trade at an early day, without direct contact. I have always considered that region the origin of Onondaga migration, without the full proof that I desired. As you will see, two barbed fish-hooks have been found there, certainly suggestive in point of time. I have seen several bone combs, all of the ruder forms;

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\*The references made by Dr. Beauchamp to figures and pages are in connection with his Bulletin 50, Horn and Bone Implements, one of the very excellent series prepared by him, now being issued by the New York State Legislature.]

fig. 186 is one of these. They were made with primitive implements apparently, but one the owner would not let me even touch. They are unusual there. The point is *when* they were made.

On Iroquois' sites, early in the 17th century, is the peculiar pottery having human faces or figures. In Jefferson County, where conventional faces abound, I have had fine opportunities for studying the evolution of these, and at last found the true face, but not on a village site. At my last visit, a few days since, I found a face from a village site identical with the Onondaga pottery; *even more than this*, from the same village came a cylindric bead of rolled *European copper*. So I have good reason to say that while no Europeans reached Jefferson County in the 16th century, their ornaments did, and may have influenced Indian art.

To recapitulate: In all the State of New York no instance of a bone comb has been reported earlier than about the year 1600, except in Jefferson County. I think I have seen three from there, my notes would show if desirable, and the Jefferson county sites are now brought down to the last half of the 16th century. Definitely, I have no extra reluctance "to credit the prehistoric Indian," etc., but I do not not believe any New York or Canadian Indian ever made a bone comb until he had European hints. There is not the slightest evidence to show he ever did; the proof is all the other way. It is not a question of what might have been, but what *was*. I do not think it was "at all necessary for the Indian to wait for centuries" for bone combs, but he evidently did. I do not think the case in the least "given away" by any statement of mine. The early combs were simple for lack of tools, and the Indian did the best he could with those he had. As soon as he had saws, teeth and ornaments multiplied. I hope the case is clear. One of the combs I figured antedates the year 1600, according to my judgment, but falls within the 16th century, and this is the oldest known. Another approximates the year 1600. *All* the rest, simple or ornamental, are of the 17th century. I have written thus fully because I do not wish to be misunderstood, and don't want you to get into a wrong position, but I know you want the facts only. I do not, of course, believing that the Indian had his idea of making a comb from European examples, attach any importance to the *hand* idea. To me it is simply a question of how a desired result could be reached with the means. How large a bone can I easily work? How many teeth can I make with my tools? Beyond that you will readily see that, like our back combs, the intent was more ornament than use.

Yours truly,

W. M. BEAUCHAMP.

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## A SHELL NECKLACE.

In figure 54 we have an example of overlapping in point of time, as well as in workmanship. The necklace, which is wholly of shell, came to us through Dr. R. W. Large, who found the parts on the farm of Mr. R. Garrow, in King Township, York County. The information respecting the circumstances of this find is not as explicit as we could wish. As a matter of course there was no string or



Fig. 54.  $\frac{3}{8}$  diameter.

thread connecting these when they were found. Indeed we are not quite sure that they were all in the ground together. As at present arranged they clearly represent three periods.

Those of most recent make are the smallest, forming the upper part of the necklace. They are cylindrical, purple and white, varying in diameter from less than an eighth to three-sixteenths of an inch,



and are of white man's make. Nearly all the fictitiously valuable wampum belts are composed of similar beads, large quantities of which were made by the Dutch and French for trading purposes in the old colonial days.

Older than these, if we may judge from appearances, are the large pendant and two long beads next to it. The latter are simply portions of the columellæ of small marine univalves of a species larger than any found as far north as the St. Lawrence. The large shell disk ( $2\frac{1}{2}$  in. diam.) is either very much indebted to European working methods, or the Indian mechanic was acquainted with the use of compasses independently of the white man. There is nothing to show that the shape of the disk itself was outlined by this instrument or by anything answering the same purpose, for the edge does not form a perfect circle, but the eight semi-circles round the edge have very clearly been made by some kind of dividers, as have also the very small circles as well as the rings they form, in the middle of the pendant, both sides of which are similarly marked. As this piece is slightly convex on each side, and of almost uniform thickness, it must have been formed from a very large shell.

The disks forming the middle portion of this necklace are so much weathered that it is not easy to say with certainty whether they are of European or of native make, but the well formed edges, and non-countersunk holes of a few, lead to the conclusion that, like the rest of the necklace, except those of columella origin, they are the work of the white man directly, or indirectly.

#### A FEW COPPER TOOLS.

Figure 55 in its proportions is more suggestive of a European tool than is any other copper specimen in our cases, and yet the resemblance may be only accidental; a short piece of metal would make a short implement, and, as in the case of figure 59 the flaring may be accounted for in connection with the hammering necessary to thin the edge. The head of this specimen is a little battered, but this is probably the result of usage since the tool was found on lot 33, concession 2, Ernesttown. We are indebted to Mr. H. S. Davy, of Odessa, for this somewhat easterly example of a copper implement.

Belonging to a different class is the specimen represented by figure 56, which was found on Clearwater Lake, Rainy River District, by Messrs. H. B. Otis and E. Ball, and was procured from them for us



Fig. 55 (26,108). Full size.

by Mr. John R. Boyle, Edmonton. It is a fairly good specimen of primitive smith-work although not perfect in detail. The piece is slightly carinated from end to end, there being on both sides a double slope or thinning to the edges, a condition which, one would think, must have been brought about by grinding or rubbing rather than by pounding, as the latter operation is a somewhat difficult one, even for a skilled hammerman with the aid of good appliances.



Fig. 58 (24,999).  
Full size.

The fish-hook (figure 57) is the only one of copper we have. It was found in water six hundred feet deep at a distance of fifteen miles from the shore of Isle Royale, Lake Superior, and was presented to us by Mr. Dobie of Port Arthur, through the Rev. Dr. John Maclean, now of St. John, New Brunswick. As there is no barb on this specimen, it is not very likely that any claim will be set up for its European origin.

Worked objects of native copper are not common anywhere, and the farther a given district is from the sources of the metal on Lake Superior, the scantier, as a rule, is their occurrence. In this province some excellent examples of native workmanship in copper have been found, and at least two, of a pattern so uncommon that we have no record of its appearance anywhere else. One of these, found in an ossuary the site of which is within the present limits of Midland, was described and figured in the report for 1890-91,\* while the other similar in shape came from Bexley township, and forms part of the Laidlaw collection.

As a rule Ontario copper specimens are mostly in the form of plain axes, spear-heads, knives and beads. A few of the axes and spear-heads are provided with sockets.

Figs. 58 and 59 illustrate two of the most recent additions to the class of plain axes. Fig. 58 was



Fig. 57 (17,811).  
Full size.

found in McKellar township, district of Parry Sound, by Mr. J. M. Ansley, and was presented to the museum by Miss Elizabeth Ansley. It is a little battered on the poll (which is unusually small), but this may have been done since it was found.

\* Arch. Rep. 1890-1, page 61, fig. 145.



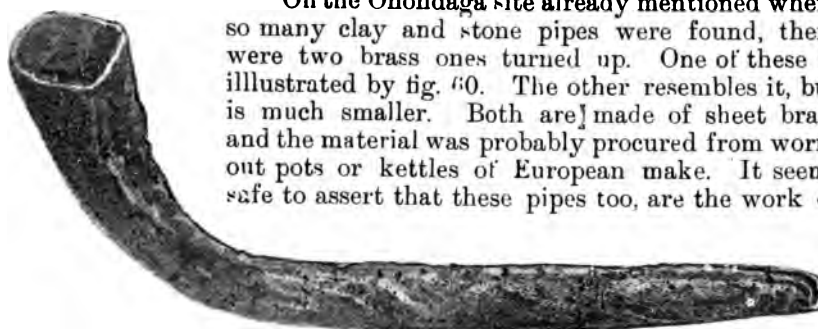
58. (22,904). Full size.



Fig. 59. (25,138). Full size.

Fig. 59 comes from London township, Middlesex county, Ontario. The only noticeable feature about this specimen is the rough style of finish at the poll end—not a finish that would indicate any intention to use the implement as a wedge, which some think was the only purpose such tools had. The flared lip is merely the natural result of hammering to thin the cutting edge.

#### A BRASS SMOKING PIPE.



On the Onondaga site already mentioned where so many clay and stone pipes were found, there were two brass ones turned up. One of these is illustrated by fig. 60. The other resembles it, but is much smaller. Both are made of sheet brass and the material was probably procured from worn-out pots or kettles of European make. It seems safe to assert that these pipes too, are the work of

Fig. 60 (25,548).  $\frac{4}{5}$  diameter.

a white man. The edges of the piece of metal are very neatly overlapped, but owing to the verdigris with which the pipe is covered, it is impossible to say whether they are soldered or only hammered, but the latter is the more probable.

The head seems to have been formed on a mandril, although it is now slightly out of shape.

From a few traces of hair adhering to the stem, the pipe would appear to have been wrapped in a bit of fur before being placed in the grave. Perhaps other things were similarly treated at burial times, although the fur has now disappeared, but the copper salts have had a preservative effect. Two or three large copper specimens in our cases have pieces of beaver skin attached to them, the fur of which is yet in a tolerably good condition.

#### BORED SKULLS.

On opening an Indian grave near Arkona, Lambton county, Ontario, last summer, among the contents were found two perforated skulls one figure 61, having six holes, and the other (figure 62) having three. Both of these with some of the other skeletal portions were kindly presented to the museum by Dr. J. E. Brown.

In every respect, as far as can be ascertained, the interments had been made in the usual way, and the top of the grave was only some eighteen inches from the surface.

Other two skulls similarly treated came to us from the farm of Mr. Harry Mayor, lot 25, concession 12, Innisfil tp. Simcoe co., a few years ago. \*

\* Ontario Archæological Report, 1899, p. 26.

Figure 61 has a few wormian bones in the occipital suture, the largest at the parietal fontenelle, the next in size is a little to the left, with a few smaller ones on the right side.

Figure 62 is the skull of a more aged person than is that of figure 61, judging from the appearance of the sutures, the parietal one having almost wholly become anchylosed, and the occipital one, partly so.

The facial index of figure 61 is a little over 80, and that of figure 62 is 75, thus determining them respectively as brachycephalic and dolicocephalic.

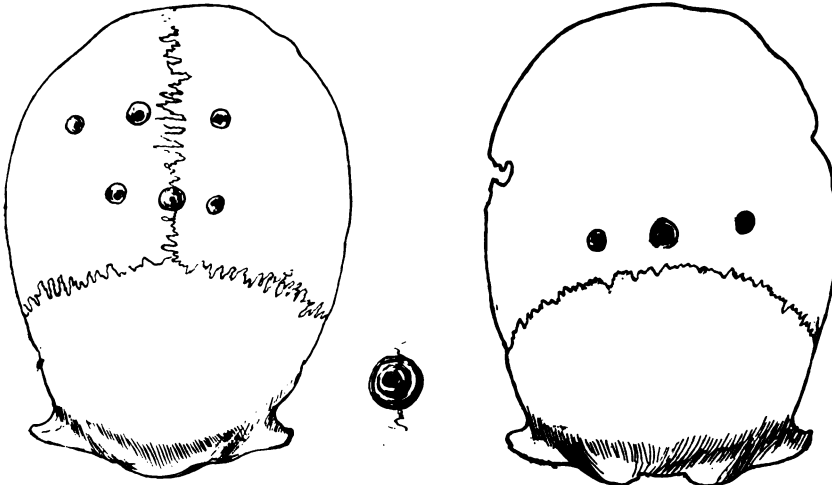


Fig. 61.

Fig. 62, (26,546).

It is somewhat difficult even to guess why skulls should be artificially treated as these and the Innisfil specimens have been. Of one thing there can be little doubt, and that is that the boring was *post mortem*; at any rate, there is nothing to indicate life energy after the holes were made, as we see in some cases where trephining has been performed on Peruvian crania, from which quadrangular buttons were removed by a sawing process.

#### A BURIAL PLACE IN ONONDAGA TOWNSHIP.

From time to time during the last fifteen years considerable quantities of valuable material have been received from a somewhat restricted area comprised in what is now the townships of Beverly, Ancaster, Brantford, and Onondaga, a large contribution from this locality having been presented to the museum by Mr. F. W. Waugh only last year. In this report it will be seen that specimens catalogued from 25,439 to 26,085 in our accession list have been added during the present year from this locality. These were collected by Mr. Walter M. Dick, of Brantford, at intervals during several years, and mainly from a number of graves he discovered on the Walker farm, lot 10, con. 3, township of Onondaga. What follows respecting this place and the specimens found there, is mainly from notes supplied by Mr. Dick.

That portion of the Walker farm on which the graves were found

containing the specimens, forms, with a part of the adjoining lot, a roughly quadrangular peninsula, along three sides of which flows a tiny stream. The accompanying sketch (figure 63) will enable the reader to make the necessary references.

The area of this land is not less than fifteen acres, and it varies in height (above the level of the creek) from about eight feet in the east, to forty or fifty in the south-west. The bed of the creek is now dry in summer, but no doubt formerly contained water all the year round.

The soil where the graves were dug is sandy.

Numerous camping sites may be traced not far from the graves, but these were almost certainly connected with a people or peoples, who occupied the ground before or after those who made it a burial place.

The graves are numbered to correspond with the order in which they were examined.

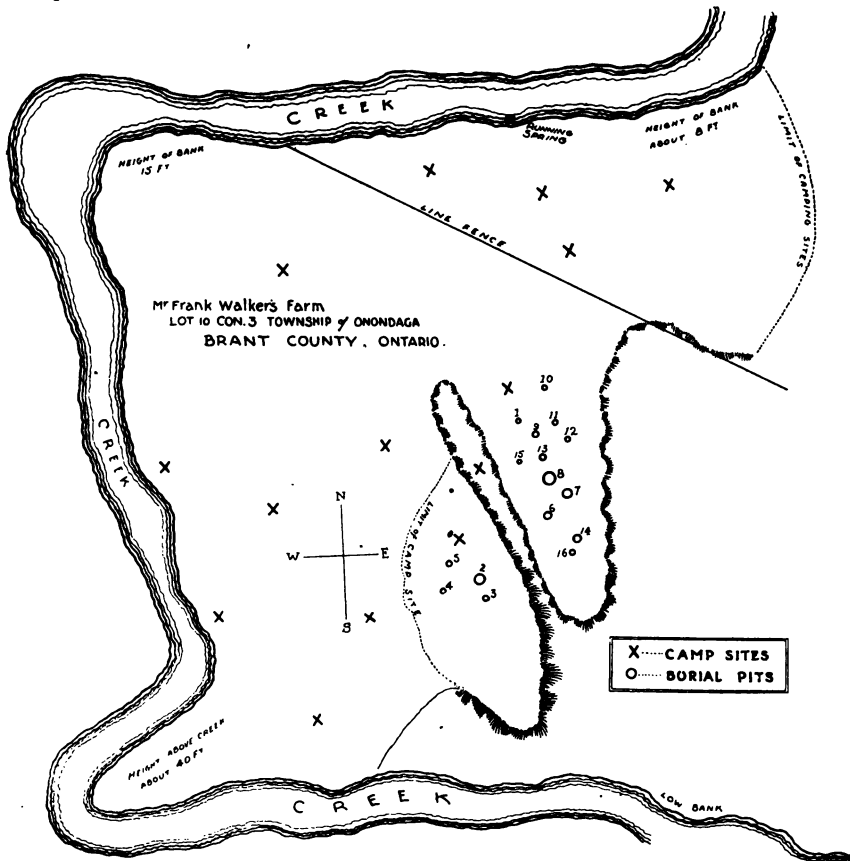


Fig. 63.

No. 1 was a little less than three feet in depth and contained two skeletons lying side by side. Besides the bones there was nothing, save a few shell beads.

No. 2 was eight feet in diameter and five feet deep in the middle. In it was some sixty-five or seventy skeletons, and some good specimens of relics.

No. 3 contained about twelve skeletons. In this grave was found a very well made white stone pipe representing an owl (Fig. 6).

No. 4. In this grave there were nine skeletons. Besides the bones there was nothing here but an earthen vessel (25,439). Some of the bones lay at a depth of four feet from the surface. The stump of a pine about eight inches in diameter remained over this grave.

No. 5. In this grave only one body was buried. Nothing else was found in it.

No. 6 contained eight bodies, and with these were a few shell beads.

No. 7 was a large grave. Besides many skeletons there were numerous relics of excellent quality and many different kinds. A brass kettle was found here.

No. 8. This was a very large grave—fully twelve feet in diameter and six feet deep in the centre. As the bones appeared to have been thrown in, regardless of order or arrangement, and so many were in a decayed state, it is difficult to say how many bundles of bones, or how many bodies in the flesh were placed in this grave.

In the very middle of this ossuary was a child's grave not more than three feet in depth, and it was through first finding this that the larger burial place was discovered. With the remains of the child were found a few shell beads, and a large circular gorget of the same material, about five inches in diameter, perforated with five holes in a row. As the relics are similar in kind to those found in the other graves, the inference would seem to be that the smaller grave is not intrusive in the usually accepted sense, yet why so situated, one may only surmise.

No. 9. Here there were the remains of eight persons. Nothing else was found.

No. 10. This was a single grave, and contained nothing but the bones.

No. 11 was a child's grave, in which was found a small shell gorget.

No. 12 contained the bones of only one person, with which were buried numerous interesting specimens.

No. 13. In this grave there were about a dozen of skeletal remains, and quite a number of fine archeological objects. This burial place was unusually deep in proportion to its diameter, its width and depth being five feet.

No. 14 contained numerous skeletons (the exact number was not ascertainable) and a large quantity of good specimens.

No. 15 was a child's grave. The only article found with the remains was a small shell gorget.

No. 16. Here there were some four or five skeletons and a few specimens.

A glance over the accession list (25,439 to 26,085) will show that the burials in most instances, if not in all, were made subsequent to the arrival of the whites, and perhaps as recently as from 1700 to 1750. Of this we have evidence in the glass beads, iron axe, brass kettles, and copper wire.

Unfortunately the graves were not opened with any other purpose than simply to secure their contents, so that it is now impossible to speak with anything like certainty respecting what many of the graves contained, neither have we anything to guide us in coming to

a conclusion as to whether the camp-sites are of older or of more recent date than the burial places.

Special notes on some of the articles from the Onondaga locality will be found elsewhere.

### A GOOD PIECE OF WORK IN STONE.

It is very seldom that anyone sees a more beautiful, or more comparatively, perfect specimen of workmanship in stone, executed by means of stone appliances, than that which is illustrated by figure 64, which was found in Comox, British Columbia. To say it is absolutely perfect, as is sometimes asserted respecting objects of Indian workmanship, would not be correct, but its degree of perfection is such as to bring out very clearly the capabilities of our British Columbian Indian, as a mechanic. The man who made this pestle had an excellent eye for symmetry and proportion. Now-a-days we have turning up here and there, writers who profess their ability to prove that it was only a trifling task to construct an immense mound; that the making of stone arrow-points was mere child's play; that the boring of holes of any size through stone was quite an easy matter, and one that could be accomplished very quickly; and that, Indians didn't know very much about how to do anything beyond clubbing one another, until the white man came here. On this account it will scarcely startle us to be assured that the Rocky Mountain aborigines knew nothing about this form of pestle, or muller, or grinder, until after the arrival of some "Kintosh" or "Boston"\*



(22,046) 5/7 diameter. Fig. 64.

in the Straits of San Juan de Fuca, or of Georgia, and that the pattern was copied by them from one in possession of a ship's doctor!

\* "Kintosh" or King George, and "Boston" are said to have been the names by which early British and American whalers and traders were known to the natives.



The pestle in question is exactly seven inches high, is three inches and a half in diameter at the base, and about two and a half at the top. In cross section no part of it is truly circular, yet the work in a general way is admirable, and quite as good as most white men could accomplish with excellent workshop appliances not including any kind of lathe.

This very fine specimen was presented to the museum by Mr. John B. Boyle, of Phoenix, British Columbia.

In Ontario the native was satisfied as a rule to use a large water-worn pebble of handy shape as his upper millstone, but to the south of us some pains were taken to make a form of muller or pestle roughly resembling the one here figured.

### BRITISH COLUMBIA MUMMIES.

Mortuary customs although not a subject of the most cheerful kind are of much ethnological value. The great variety of them within the limits of the Dominion would surprise many readers. British Columbia alone supplies us with examples of what may be called mummies.

Two of these figures 65 and 66 have come into our possession in a somewhat roundabout way, and we are not yet able to supply as much information respecting them as we would like. Inquiries made, have been, to a large extent, unavailing. The most satisfactory reply comes from Dr. C. F. Newcombe, of Victoria, who writes:—

"I have myself seen on the west coast two modes of burial, one in caves or natural fissures, and the other on the surface of the ground.

In both cases the bodies have been wrapped in matting and then placed in boxes\*, plain, or painted with totemic devices and



Fig. 65 (26,736)

\* An excellent coffin-box of this kind in the museum is made without the board that forms the sides having been cut. The corners are half checked, and bent. Lid and bottom are shouldered deeply to fit over and outside of the sides, and the exterior is decorated with characteristic designs in black. See report for 1891, page 53.

then simply deposited on the surface of the ground or in the fissures. Usually these burial places are near the villages, often in the woods close by. Sometimes, as at Kyuquot, an isolated rock is utilised, which was formerly a fortified (palisaded) place of refuge in times of war".

From Mr. W. H. Jones, who presented us with the coffin referred to in the foot note, I learn that stones are usually piled cairn-like, over the coffins when placed on the ground. Even this, one would think not a very effective precaution against the attacks of predacious animals unless the bodies themselves are in such a condition when buried, as not to offer the animals any temptation.

Figures 65 and 66 are different views of the same mummy, and tell their own story so far as condition and appearance are concerned.

It may be stated that the date of burial of the bodies is not very remote, if we may take our clue from the fact that they were wrapped in coarse woollen cloth, of a deep red color, fragments of which are still adherent to the remains.

Since the foregoing was in type, a letter has been received from Mr. John A. Coates, to whom we are indebted for the gift of the mummies. Mr. Coates' prolonged absence from home accounts for the delay in his response to my enquiries.

"He writes:—The specimens were obtained on the west coast of Vancouver Island. The largest one was obtained from a shallow cave on an island used for burial purposes. The smaller mummy was upon an island, and was wrapped in cedar bark blankets, and covered by some split cedar boards.

These evidently belonged to the Clayoquot tribe."

There is still much, no doubt, to learn respecting the mortuary customs of the people with whom the mummies were connected.



Fig. 66 (26,737)

## THE STANDING ROCK.

*By F. Birch.*

To the lover of Indian lore, (and comparatively speaking, there are but few) there is found on page 106, *Archæological Report*, 1902, a paper of thrilling interest from the facile pen of the Rev. A. E. Jones, S.J., Loyola College, Montreal, and more especially does this apply to the people of Collingwood, Craigleith, Thornbury, and surrounding country, directing attention as it does to a matter of aboriginal history, regarding the Huron nation which existed in their immediate neighborhood. Father Jones discovered the "Standing Rock" (mentioned in the *Jesuit Relations*) in the township of Nottawasaga near the junction of the townlines of Collingwood and Osprey, and located the Indian villages of St. Mathias and St. Jean, the former below the Rock of Ekarenniondi, and the latter, with a population of six hundred, twelve miles further south in the township of Osprey. It is well known that the inhabitants of those villages cultivated corn, pumpkins, sun-flowers and tobacco. At St. Jean, allusion is made to the curing of and the rapid and successful growth of the indigenous tobacco plant, page 112. Now, I cannot help but think that after all, Father Jones has not found the right place, and I shall now state why I disagree with him. I contend that in those days, corn and tobacco could not be grown on the tableland of Ontario, so far from the lakes or from Georgian Bay, as Osprey, on account of the summer frosts. The "oldest inhabitant" (and surely he ought to be entitled to some respect), is emphatic on this point. Many farmers in this section of the country can speak by bitter experience of the terrible effects of the frosts of early days. I have seen the wheat when it was nicely out in head, cut down to within two inches of the ground, and the timothy utterly destroyed in Osprey, Holland, Artemesia and Euphrasia. Artemesia became a byword and was called the "Heart of Misery," but happily this condition of things has passed away now that the country has been cleared and cultivated. In our day, at the base of the Blue Mountains, farmers are about two weeks earlier with seeding and harvesting than they are in Osprey and the southern portion of Euphrasia. There could be no inducement to found a village in Osprey unless for the abundance of game. Elk and moose abounded. Occasionally the remains of both animals are found with those of wolves in the deep crevices of rocks that intersect the ground in some places. After many inquiries among the people of Osprey I have failed to find any evidence that Indian villages existed in the township, and they all assert that such rocks as those in the "Devil's Glen" are common in this part of the province. Assuming that the summer frosts rule out the existence of those villages, where then shall we look for Ekarenniondi of the Petuns? I would suggest about five miles and a quarter further north in Collingwood at the place known as the "Indian Caves." I had heard of an Indian village site below the caves, and was positive of another on lot 28, con. 10, Collingwood, twelve miles away, which tallies with Father Jones' account, only that it is to the west instead of the south. I determined to investigate as soon as opportunity

offered, and if possible to find St. Mathias. This would give the necessary condition. The two frontier towns at the confines of the Petun nation were open to attack from the direction of Toronto, the gateway to the Indian country. I went to examine the "Indian Caves," lot 14, con. 2, Collingwood, Oct. 9th, and the weather was all I could wish for. Fire had run over the base of the rocks and burnt down the standing timber, and a thick growth of underbrush had taken its place, affording a splendid cover for partridge and the cottontail. The rocks extend east and west for half a mile, and a cleavage runs the whole length, the detached portion having settled downwards and outwards, and in places the top has fallen back into the fissure, leaving caves underneath, but in some places standing entire. Being alone and a stranger I did a lot of hard climbing which could have been avoided had I known what I do now. I took "Excelsior" for my motto and went up and over every obstacle. Farther to the east Mr. Blaikie has a good road for the accommodations of visitors, of whom thousands visit the caves every summer. I found the rocks rough and rugged, and on a grander scale than any I had yet seen, and more than one place which might be truly designated the "Standing Rock," but there is a particular spot on Blaikie's farm where the rock overlooks the old village, and this I think is Ekarenniondi. Picking my way carefully among the debris, I came to a sort of amphitheatre forty or fifty feet in diameter where a second slice had fallen off the main cliff and into the chasm, making a floor about fifteen feet below, which was covered with vegetation. Looking down I was surprised and pleased to find I had intruded on the private domain of a porcupine all in his "fretful quills." I watched him for sometime as he fed on the leaves and berries, and I thought to myself, well there is a "Huron" that no Iroquois brave would like to fall upon. I spent nearly two hours clambering among the rocks, sometime down in the caves (where the sun's rays never penetrated) then up on the pinnacles until I was thoroughly satisfied that here was the "Standing Rock." In one place the rocks rose in the shape of a pyramid with two huge blocks on top, side by side, affording space enough to accommodate a dozen men. Here I took my stand and looked on a scene of marvellous beauty, to my right was Ossossane where the fugitives from the Huron villages crossed on the ice, journeying the whole night to reach the friendly shelter of St. Mathias (at least I presume so) page 110.

How I came to find the village site of the "Standing Rock" or (what I suppose to be) St. Mathias is as follows:—

Some twenty-five years ago I was informed by a farmer that where he had built his house and cleared his garden patch, had once stood an Indian village. He described how the lodges must have stood in a circle, by the position of the beds of ashes which he found here and there, and the ashes were deep. He spoke also of finding tomahawks, pipes, bones, pottery, etc., etc., all of which information afforded me great pleasure, but I could not find time just then to investigate, and I little thought that I should ever be back to the same place, but it is always the unexpected that happens.

Going down the mountain road a short distance, I turned into a byway leading off to my right, and going in an easterly direction. A

few minutes walk took me to a farmhouse belonging to a family by the name of Haney. I found them a very friendly people who received me kindly and soon made me feel at ease. In interviewing them I was much disappointed at first. I could not glean any tidings of my friend Smith, but after chatting sometime, suddenly Mrs. Haney remembered that a Thomas Smith had once lived there, but had since died; that was all I wanted to know. After that, all was smooth sailing. I was on lot 14, con. 2, Collingwood, owned by Samuel Haney, the very place I was searching for. The village site is at the north end of the lot, and at the south end the rocks stand out in bold relief. The village had stood on slightly rolling ground, just enough so for sanitary purposes; it had an easterly exposure, and was on the west bank of a brook whose spring came from the rocks above. Miss Haney took me to search for "relics." The potato patch where we went just north of the house had been harvested so that the ground was nice and clean. I counted four middens in this patch and near the bank of the little stream; each of them I should judge would be twelve feet square, and a foot deep or more, and were north of the village on lower ground. With the spade I happened to turn up some of the subsoil, and behold there was "Paint with which they were wont to daub their faces," *Archæological Report*, 1902, p. 107. The clay was rich in oxide of iron, and with a mixture of grease would answer the purpose quite well. Miss Haney said "anything you find you are quite welcome to; we have given away a great number of pipes to visitors." I thanked her, and strange to say in a few minutes the young lady handed me an excellent pipe picked up at my feet and which I had passed unnoticed. It was of limestone, with a reptile carved in bold relief upon it. It was stemless and had holes bored through the bottom for a string, perfect in all but the head of the reptile which was broken off. I found several portions of broken pipes and pottery; two bears' tusks, a portion of a human skull and a strip of iron about five inches long and two inches wide, sharpened at one end for skinning or scalping, perhaps it was a piece of a sword blade. This goes to prove that they were in touch with the French. Miss Haney also informed me she had found a quantity of large beads, about one hundred yards north of the village, but unfortunately they had been either lost or stolen. I attach great importance to these beads. I think probably they belong to a priest's rosary,

I noticed one thing in particular when I left home, namely, that everything had been cut down by the frost while here, on lot 14; con. 2, all was fresh and green, no sign of frost whatever. Half-past four p.m. came all too soon, and it was with a slight twinge of disappointment that I found my holiday at the Blue Mountains of Collingwood had ended, but time was inexorable and I had to depart, but I left with the satisfaction that my exploration of St. Mathias had been successful, still, I cannot prove that I am right, but my reason for writing this article is simply this—believing that Father Jones has made a slight mistake of five miles in spite of all his elaborate calculations, owing to those misty documents written by the old French Chroniclers who have got things a little mixed, I would like if possible to make them right as far as my knowledge goes, and to help to find the spot, and perpetuate the fame of those brave, noble-hearted, self-



denying missionaries, who sacrificed their lives for the good of the cause they represented. The Standing Rock would have remained a mystery but for the labors of Father Jones, as well as for his very exhaustive and charmingly written essay in the Archæological Report for 1902.

## VICTORIA COUNTY.

By GEORGE E. LAIDLAW.

New sites reported, but not visited, are as follows:—

No. 36. East half lot 20, con. 8, Eldon Township, owned by Donald McArthur, cleared by J. Sutherland forty years ago, site now occupied by buildings, usual relics, ash beds, pottery fragments, etc. Also, a skeleton found under the roots of a large maple tree.

No. 37. Lot 6, con. 10, Carden Township, owned by Patrick Duggan; attention being called to it by John Cuppins, Cameron P.C., who found relics there in 1902. The usual class of site, situated on a high gravelly hill, Beaver meadow close to hand. Arrowheads occur here.

No. 38. A large area on Mr. Bruce's farm yielded lots of pottery fragments and other relics, when first cleared many years ago.

Lot 41. S.P.R. Eldon Township, Kirkfield P.O., Mr. Bruce recovered a whole pot from this place, and said the place was literally paved with relics when he first went on the farm. My attention was first drawn to this site and No. 36 by Mr. S. Truman, Kirkfield.

No. 39. W. Thornbury's lot 12, con. 10, Eldon, is another site in the group north of Goose Lake, Eldon and Fenelon Townships, distant about three miles. The usual relics, etc., prevail here.

In connection with these sites I may say that they are not immediately on the edges of lakes or water-courses, but some little distance inland in hilly localities with soil eminently suitable for aboriginal cultivation, and with the exception of No. 37, which is north of the Talbot river, lie a good distance south of the Portage along the Talbot river. Nos. 36 and 38 may be classed in a group with Nos. 9 and 10 (see Report for 1901, p. 106), occupying the high hilly table land south of Kirkfield.

*Relics.*—A copper arrowhead picked up by myself, on site 20, last September, block E, Bexley, on lake shore, much weathered; dimensions, three inches long, by  $\frac{7}{8}$  inches width of blade, which is flat, and not possessing the triangular cross-section so common to copper spears and arrowheads. The socket is slightly shouldered to prevent the shaft from slipping up the blade, and is  $1\frac{1}{4}$  inches long.

Iron knife made from saw blade, evidently shaped with a cold chisel. It is in an unfinished condition, was found on banks of Grass River, Victoria Road, P.O., presented by Dr. Jas. Grant. Blade,  $6\frac{1}{2}$  inches long, tine 2 inches. Some doubt may be thrown on this relic, as it may have been made by some early pioneer or hunter. It is worthy of remark that the cold chiselling has been done all on one side.

A very large stone bear pipe was found in August or September, 1902, on lot 6, con. 20, Tiny township, Simcoe county, Ont., by Mr. T. H. Newberry, who disposed of it to Mr. Oliver Glaspell, Powle's

Corner, P.O., Fenelon township, Victoria county, from whom I obtained it. Was found on the route of the Indians, or trail, from Sawlog Bay to the highlands of Tiny; no other relics were found near it, it being found on the surface of the ground. Thus, to my mind, relegating it to the later Hurons, or to the Algonkins, who occupied that locality upon the forced retirement of the Hurons. The pipe was in a fragmentary condition, and is now restored *minus* the forefeet and a portion of the frontal bar. Material, a dark grey slate; posture similar to the animal pipes figured in report for 1902, pp. 40-43. Dimensions  $6\frac{3}{4}$  inches in perpendicular height, distance between parallel lines at back and nose  $4\frac{1}{4}$  inches; greatest thickness of body from side to side, 2 inches; greatest depth of body from back to front, 2 11-16 inches; length of head, 2 3-16 inches; breadth behind ears, 2 7-16 inches. Stem hole bored with a tapering drill, bowl shows plainly drill rings, and contracts very rapidly, being  $2\frac{1}{2}$  inches deep and  $\frac{3}{4}$  wide at top. Stem hole is at the back. Eyes are large, deep, circular depressions. Ears prominent and rounded, the right one evidently being slightly broken at one time, and then ground smooth. Ear holes slightly defined, as also are the nostrils,—most rare occurrences. No slots or markings on surface of pipe other than those that represent the chaws. No basal perforation, though there are deep depressions produced by boring where the basal perforation is usually situated in these pipes. A deep nick terminates each hind foot, separating it from the frontal bar, thus showing probably that the designer did not intend the frontal bar as a branch clasped by the feet as in other cases, but rather as produced, tail and hind paws slightly raised from body. The portion of the frontal bar immediately opposite the hind feet is slightly larger than the remaining portion. The top of the frontal bar, and the fore feet are missing. Mouth strongly defined, face very much “dished” or “hollow,” strongly resembling a raccoon’s, but the jaws are too long in proportion, and too square at the end to resemble that animal in any marked degree. The drill has been used in forming the throat, and marks of sawing and rubbing also appear. Are these what McGuire calls “file marks” in his aboriginal pipes, etc.? The material changes to a dirty purple on the frontal bar; weight  $2\frac{1}{2}$  lbs. avoirdupois.

It has been suggested that this specimen represents the brownish variety of the common black bear. At any rate, the contour of the face is directly opposite to that of the Bolsover bear pipe, p. 40, Report 1902. This pipe is of purely aboriginal workmanship, the design being bold, the head resembling style of Huron clay pipes. The pipe though called a bear-pipe shows a composition of features; in the large, round eyes and hollow cheeks of a raccoon, and the strong heavy jaw of an old dog wolf. The marks of boring on the surface of body show the use of blunt drill.\*

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\* It is probable that a full description and illustration of this remarkable pipe will appear in the Archæological report for 1904.

## VILLAGE SITES IN NORTH ORILLIA.

One of the best known village sites in North Orillia is to be found on the farm of Mr. Amos Rogers, lot 6, concession 13.

When first 'located' for settlement, now nearly seventy years ago, Mr. Rogers' father observed what seemed to be comparatively recent signs of a clearance, that is, an area of some two or three acres was occupied by trees of considerably smaller growth than those of the neighboring bush; and it is said that straggling Indians camped occasionally on the spot.

Since the land has been cleared, numerous traces of Indian occupation have come to light, in the shape of broken pottery, flint chips, pipes, and stone tools. Mr. Rogers had brought some of these together, but all were lost in a fire which destroyed his dwelling-house. We now have records of numerous fires in which larger or smaller collections of Indian relics have been destroyed, and the moral is: Do not keep your archæological specimens at home—send them to the Provincial Museum, where they will be not only comparatively safe from destruction by fire, but will be available as objects of more or less interest to everyone concerned in the study.

A close examination of the ground on two visits failed to disclose much on the surface, but perhaps, when the ground has been loosened by the plough, evidences of occupation will be made more apparent.

From Mr. Rogers and others, I learned that some years ago a shallow grave was discovered not far from the village site, and that two bodies were found in it.

The village site on the Roger's farm is at the northern extremity of Lake Couchiching, and was at a convenient distance as a halting-place before or after passing the Severn, or it may mark what was one end of the trail, or portage, of which the old settlers say there were numerous examples between Couchiching and the Muskoka hunting-grounds.\*

A few fairly good specimens found on the farm were kindly presented by Mr. Rogers to the Provincial Museum.

A short distance south of Washago, in the township of Rama, another village site is reported on the lake shore, but as it is on land forming part of the Indian reserve not very much is known respecting it.

Not very far away from the town of Orillia, on lot 6, concession 5, there is a somewhat unusually large and interesting village site to which attention was directed by Mr. C. H. Hale, who was also good enough to accompany me to the place.

It is on the brow and summit of the highest terrace rising from Lake Couchiching, and its greatest elevation does not, probably, exceed forty feet. The situation was an excellent one for aboriginal strategic purposes—far enough away from the water's edge to be thoroughly obscured by the surrounding forest; high enough to give it command of approaches from the shore, and capable of being well

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\* On this subject, Mr. Chas. I. Robinson writing to the *Orillia Packet*, says:—The main Indian trail of the lower waters went down the west branch, and came out the Severn river. So plain was the track that it was worn into the rock. The rider of this has been over all the portages from these waters to those of Muskoka, anterior to the white man's settlement."



protected on the land side by means of the ordinary Indian methods. In addition to these advantages the terrae at this point has been eroded deeply, and forms a gully the sides of which are so steep as to make the climbing of it anything but easy.

It is now many years since the land here has been cleared, and most of it cultivated, in consequence of which, and the whole area being in sod, there are scarcely any surface signs to indicate that here was once a village or town—perhaps one of the original Cahiaques. Many native born Orillians however, of mature years, have a distinct recollection of the numerous ash-beds that marked this place, and from which, I am assured by Mr. Hale, both young and old used to dig up clay pipes, flints, and implements of various kinds.

Mr. J. H. Hammond, Solicitor of the Supreme Court, Orillia, writes:—"Orillia seems to me to have been a very populous place in the early days, and the subject has been studied by me for a number of years, in fact, since boyhood, tracing as well as I was able the different village sites; in fact, I do not know all of them yet, as within the last few days I have heard of two more that will be verified by me as soon as the snow is off the ground. I have visited over forty-six of these sites, all within the bounds of Orillia, North and South, all with well-defined ash heaps and pottery (broken), so you see that the subject is to me interesting as well as instructive."

Mr. Hammond has rendered very valuable assistance to Mr. A. F. Hunter by way of directing attention to village sites.

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## INDIAN VILLAGE SITES IN NORTH AND SOUTH ORILLIA TOWNSHIPS.

The settled parts of both townships are hilly. The ends of two long ridges come out of the adjoining townships along the west side,—the one out of Medonte into North Orillia, the other out of Oro into South Orillia. Besides these, a long ridge runs through both townships, near Lake Couchiching and parallel with it, for several miles. This prominent line of high ground, which takes a north-easterly direction, is known locally in North Orillia as "The Ridge." It extends as far as the ninth concession of that township, and owing to its isolated position, it is quite a conspicuous feature in the landscape. It deserves our special attention, as it is, in a sense, the barrier that holds back the waters of Couchiching from pouring directly over to Georgian Bay, deflecting them by the Severn River.

At the town line between the north and south townships, there is a break where "The Ridge" in North Orillia is cut off from the high ground in South Orillia. Branches of Silver Creek take rise in this gap, becoming fair-sized streams; and the Midland Railway utilizes it for a passage. Village sites of the early Huron period, some of them quite populous, are found generally along "The Ridge," but are more numerous in the vicinity of the Silver Creek openings than elsewhere.

The "Algonkin" shoreline girdles these hills or ridges, as elsewhere; and this extinct shoreline is marked on the accompanying map to give the altitudes of the different parts of the townships. The "Algonkin" is a strong shoreline everywhere, but in the Orillia townships it is even stronger than elsewhere. The main cutting is

very distinct, and about sixty feet lower the base of the submerged filling also becomes a well-developed shoreline. The term, as used in this report, applies to the main cutting. This main strand of the shoreline, in the vicinity of Silver Creek, attains an altitude of 875 feet above sea level, or 155 feet above Lakes Simcoe and Couchiching.

North Orillia is a large township, but parts of it are still covered with original forest. It has, accordingly, been found unnecessary to show more than a portion of this township on the accompanying map.



*The Village Sites.*

The list of 34 sites (12 in North Orillia and 22 in South Orillia) may not contain one-half the sites that will ultimately be recorded for these townships. It is necessary to emphasize that I make no claim for completeness or perfection of the lists, especially that for the north township. But the sites I give are the more conspicuous ones, and will lay a foundation for future work by showing the lines of early occupation and travel. Even these show evidences of a considerable population in the early Huron epoch,—the first half of the seventeenth century.

The plan followed here being the same as in earlier reports, the task of collecting the data and its attending difficulties have been sufficiently dwelt upon in those reports. In the present one, equal pains with those previously issued have been taken to make the observations correct, and the features described may be verified in most cases by everyone for himself.

The Huron occupation of the region now under consideration, in relation to its physiography, was not different from that of the townships previously examined. The Hurons, kept to the high ground or ridges, as we found them doing elsewhere. The ground in the south part of South Orillia was not well adapted for occupation by Hurons and their allies. It is too stony and gravelly, and the small ridges there are too abrupt and narrow for their settlements. The high ground above the "Algonkin" shoreline in the north half of South Orillia, according to the remains that have been found, was their favorite habitat. Besides this, Brough's Creek and its branches, falling into Shingle Bay, made a wide obstructive marsh.

Like the other townships of this district, each of which has an important feature of some kind, the Orillia townships have one of their own not less interesting than the others. They contain the line of contact between Huron tribes and those named Algonkin in the Jesuit "Relations." Some of the village sites show differences of their own, when compared with villages in other townships known to be distinctly Huron. Hence, I am of the opinion that the former were the villages of the Algonkins. There may have been some overlapping of the Arendarronons (the most easterly Huron tribe) with the Algonkins, so that some sites belonged to one and some to the other. And as the sites here as elsewhere do not all belong to the same year, or even to the same period, one may have followed the other over the same ground. Further study of the sites will, perhaps, reveal some movement of this kind. But in any case, the sites which I am inclined to call the Algonkin sites have distinct characters, and might almost be said to preponderate over the Huron sites in the Orillia townships.

The Indians who inhabited the sites which show the differences just referred to, when compared with those of known Huron sites, show marked development along certain lines. The more conspicuous of the differences are as follows:—

1. Disks. There is an abundance of stone and pottery disks. These are found in small numbers on some known Huron sites, but not in such profusion as we find in the present instances.

2. Individual burials. A patch of single graves is to be found at every one of the sites in question. This is unlike the mortuary practices of the true Hurons who practiced scaffold burial, combined with bonepits. In most cases, however, the patch of single graves is accompanied by a bonepit or two.

3. Highly decorated pipes and pottery. In the ornamentation of clay pipes, the pictorial art had a more extensive development in the Orillia townships than in the townships farther west where the true Hurons were located. We may safely conclude this ornamentation was due to Algonkin influence, whenever it is found on Huron sites. It is not to be understood that modern Algonkins necessarily show a continuation of the skill of their ancestors, or any trace of it. It was the Algonkin-speaking tribes of three centuries ago to which our remarks apply.

4. Bone needles, awls, etc. The greater abundance of these on the sites called Algonkin, by us, may have been due to better supplied hunting grounds than the Hurons possessed. The latter tribes were more agricultural in their pursuits, and more populous.

5. Flints. These are more abundant than on true Huron sites.

6. The Algonkins showed remarkable ingenuity in forming arrow-heads out of pieces of brass from worn out brass kettles.

Some of the features just mentioned resemble those of some sites in the district near Balsam Lake, for the descriptions of which we are indebted to Geo. E. Laidlaw. The Orillia townships are not far distant from some of the sites which Mr. Laidlaw has described, and the points of similarity of some sites are therefore not to be wondered at. His descriptions in former Archæological Reports bring out well the points of contrast between a proportion of the sites in his district, near Balsam Lake, and true Huron sites.

For locating the position of Ste. Elizabeth, the mission of the Jesuits among the Algonkins of whom we have been speaking, Ducreux's map, although it gives this mission, fails to help us much, as there is a confusion of North River with Severn River, and the entire omission of one of them, as I previously pointed out. It is possible, however, that Ste. Elizabeth was in the distinctly defined group of villages near Silver Creek. In townships previously examined, we found evidence to show that a mission often belonged to a district marked off or isolated by physical features; and the one in question is so distinctly defined as to lead us to make this conjecture with a fair degree of probability. On the other hand there is a group of sites north of Bass Lake, partly in Medonte township, occupying a similar position with reference to North River that the Silver Creek group does with reference to Lake Couchiching and the Severn, and it will be impossible to settle the question definitely without taking into account the group partly situated in Medonte.

European relics are abundant in the Orillia townships, and this is one of their chief characteristics. Iron or "white-men's" relics have been definitely reported from 26 of the 34 sites, or 76 per cent of the whole. In this respect, the Orillias agree with the northerly tier of townships—Tiny, Tay and Medonte.

Some people have claimed that Cahiague, the Huron town visited by Champlain, was situated near Lake Couchiching, and was perhaps

the Mount Slaven site. The improbability of this site having been Cahiaque is discussed in the description of the site itself.

### *Burials.*

There are eight bonepits reported, viz., at Nos. 6, 7 and 10, North; and at Nos. 3, 4 (2), and 15 (2), South. Two pits each are reported for the two last mentioned sites. Patches of single graves or individual burials occur at even a larger proportion of sites than in townships hitherto examined in our passage through the district of the old Hurons. Figures thus based on aggregate results afford us reliable and instructive data. In short, we have found this practice of burying in single graves where we locate the Algonkins; and we may, therefore, conclude that the single burial grounds in the other townships (such as No. 41, Oro), were due to the presence or influence of Algonkins. Bonepit and scaffold burial was evidently the rule among Hurons.

### *Trails.*

In these townships, as elsewhere, the Indian had his trails in accord with the hills, valleys and streams, following their natural order and positions. The white man pays but little attention to these circumstances, and has almost forgotten to take them into account in his reflections on Indian days and ways, except in one or two cases, notably the Coldwater Road. The Town of Orillia, like most other towns of our fellow-Caucasians, is built at the meeting-place of several Indian trails. It is, or was in the days of the forest and the red men, the centre point of branching routes. These were for the most part, not canoe portages, but forest trails, pursued by the Indians when journeying without canoes. It may be expedient to take these trails in order, passing around the various trails as around the spokes of a wheel.

The Muskoka Road. From the abundance of relics and sites found along the high ground in South Orillia, and thence along "The Ridge" in North Orillia as far as the ninth concession of the latter and beyond it, it is evident that a trail followed the ridge parallel with Lake Couchiching, but inland some distance from the lakeshore. The writer has frequently pointed out in connection with other townships, that the ridges, which were wooded with hardwood chiefly, invariably had trails along them. The low, flat land contained swamps or thickets and were less penetrable for walkers. The present instance is no exception to the rule. From Orillia town to Washago, the Muskoka Road, opened prior to 1858, along the east flanks of the ridges, and also parallel with Lake Couchiching, is the modern representative of the old forest trail. The present road, however, runs perhaps a little nearer the lake than did the old trail itself, yet the two follow the same course. This trail was in use down to modern times. The Rev. Dr. Gray and other early settlers testify to the existence of the trail here within their remembrance. There were also portages to the Severn River, and these crossed the Muskoka Road or trail to Washago.

The Coldwater Road. This was a long portage from the Narrows, or rather from Lake Couchiching at the point where Orillia town now stands, to Coldwater on Matchedash Bay, its length being fourteen

miles. In 1830, when Sir John Colborne, the Governor of Upper Canada, collected the Chippewa tribes of the district into a reserve here, extending along the portage, the original trail was cleared out as a road for vehicles, and it has remained an important highway to this day. Northwestwardly from the fourth line (S. Orillia), at the Orillia Cemetery, this road now runs through flat ground. But there is a conspicuous bar of gravel and sand, or old lake ridge, across this valley or channel, only 15 or 20 rods north of the present surveyed road. This bar would carry the original trail. A similar remark applies to the crossing of another channel nearer Bass Lake. Elsewhere the present course for the road is almost identical with the trail.

The Huron trail out of Oro to Orillia town site. This trail, which is the one Champlain evidently followed, is now represented by the Oro Road. Although the latter follows a straight course along surveyed lines, it carries a large traffic over the same route, the lines of transportation for white men being almost the same as those for their red predecessors, as in so many other places.

The Atherley Road. This evidently follows the old trail from Orillia town to the "Narrows", used when the aborigines travelled without canoes.

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#### CATALOGUE OF SITES—NORTH ORILLIA.

##### i.

On the east half of lot 21, concession 5. This place is far down the North River. Cranberries and huckleberries grow plentifully in the neighborhood, and have attracted the aborigines thither from time immemorial. Surface rocks make their appearance a little way off (viz., about lot 22) and extend northward indefinitely. In the summer of 1902, Fred Longhurst, the owner of this lot, plowed up an Indian's skeleton and an iron tomahawk.

##### ii.

On the east half of lot 11, concession 3. Jay Walker. This site occupies a hill, and numerous relics have been found, including iron tomahawks. Flint arrowheads are plentiful.

##### iii.

On the west half of lot 6, concession 2. Chas. Clark. They have found numerous relics and fragments, especially in their garden, but the site has been partly obliterated by cultivation. It extends into lot 7, formerly owned by the Drinkwater Brothers. The land hereabout is flat, but a little way east drops at one of the "Algonquin" shore lines.

##### iv.

On the east half of lot 2, concession 1. A. Margrett. On the south side of North River numerous remains have been found. Chas. H. Moffatt once lived here and found numerous relics of the usual kinds, but it is noteworthy that his family found no relics of Euro-

pean make. They found many good flints here, but pottery fragments were not so abundant as at their present place in South Orillia. This was Jacob Powley's homestead in former years, and many surface pits (*i.e.*, empty caches, or, perhaps, single graves) were to be seen at that period.

## v.

On the east half of lot 1, concession 2. R. J. S. Drinkwater. His father, the late Capt. John Drinkwater, settled here in 1832. They have found many iron tomahawks, arrowheads, and stone axes on this farm, and north of Mr. Drinkwater's house some pottery fragments, showing occupation. Mr. Drinkwater has been very observant in matters of this kind; but although he has found numerous relics he has given them all away without making a collection of his own. This locality was once a favorite place for beavers, especially on a small stream running into North River here. The place is surrounded by streams, and thus somewhat protected as the site for a village.

## vi.

On the east half of lot 2, concession 4. Before the year 1870, Edward Turner discovered a bone-pit here, near the camps. He was following a path through the woods when he noticed a depression in the ground, and having seen such burial places before, he resolved to dig into it. On doing this, he found the deposit of human bones. He also found in the pit five brass kettles; one of these contained the moccasined toes of a squaw, which had been preserved by the copper oxide, but this relic decomposed when exposed to the air. According to Mr. Turner's description of the pit, it contained hundreds of skeletons. The soil is very sandy at the place. The pit is half way west in lot 2, and on a low ridge, along the crest of which the above-mentioned path followed. F. W. Fraser, of Toronto, who took part in the opening of this pit in or about the year 1885, was the first person to give me information of it. There were various single graves found around about the large bone-pit. In one of the isolated graves there were three skulls, one of which was supposed to be that of a European person, though with what certainty of proof I have been unable to find. Altogether there were some thirteen kettles found in the pit, and some wampum. In the single graves were found a clay pipe, a stone pipe and an iron tool.

## vii.

On the east half of lot 1, concession 4. John Ego. This lot was formerly occupied by the late Thomas Campbell. Some years ago, a large bone-pit was found on the southeast face of a hill, about half a mile west of Silver Creek. It was dug out at the time. Mr. J. H. Hammond, of Orillia, who gave me the particulars of this pit, also informed me that the soil at the place is sandy, and would be easy for the aborigines to dig with their roughly-made wooden tools.

## viii.

On the southwest quarter of lot 2, concession 5. Archibald Fyfe. This site is on the northwest side of Silver Creek, and close to it. Soil, sandy. It occupies a hillside. Mr. Fyfe has found numerous remains here, including stone axes, clay pipes, beads, etc.

## ix.

On the southwest quarter of lot 1, concession 5. Geo. Greer (who lives upon east half lot 2). The site is on a sandy plain, on the north side of Silver Creek. Iron tomahawks were found at or near this site, and Wm. Rouse, junr., of Mitchell Square, found a clay pipe of the "pinched-face" pattern, which is a distinctively Huron or Tobacco Nation form, belonging to the early French period or earlier. Mr. Rouse also found a part of the blade of a rapier. Mr. Greer has found, besides iron tomahawks, a steel knife, flat wampum beads, pottery disk and clay pipe bowls (Huron forms). There are or were some artificial depressions in the surface of the ground at this site.

## x.

On the west half of lot 3, concession 6. William S. Brennan. On the ridge at the rear of the dwelling-house, considerable quantities of pottery fragments and other remains are found. The pottery here was highly decorated. Mr. Armson, a relative of Mr. Brennan, while once excavating for the foundation of the house, found a large bone pit almost underneath the front door.

## xi.

On the west half of lot 5, concession 8. Robert W. Holmes. This site is a patch on the summit or brow of the Algonkin shoreline and consisted of ashbeds, with pottery fragments, some brass arrowheads, etc. It had a defensive position. Mr. Holmes has found iron tomahawks (French make) by dozens, and these are also to be found on other farms about here.

## xii.

On the east half of lot 6, concession 9. Charles Brailey. This site is near a small stream, and is in a line with the east end of "The Ridge" and a nice cove or bay of Lake Couchiching, the head of which is at the end of the eleventh line. The camps are about three-quarters of a mile from Lake Couchiching. There were ashbeds and empty caches or surface pits. In the ashbeds they found, in former years more frequently than in late years, brass arrowheads, bone needles, clam shells, etc.; and in the vicinity, iron tomahawks (French pattern) and stone skinners.\*

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\* As elsewhere pointed out these were axes.



## CATALOGUE OF SITES—SOUTH ORILLIA.

## i.

On the south half of lot 1, concession 1. Henry W. Smith. Here was once the Indian Agency on the Coldwater Road, and at an early date a clearing had been made in connection with it, in which the Indians grew corn. Remains of this have been found. A site of the early Huron period also, yielding some relics of various kinds—stone axes, pottery fragments, etc.—has been found half way east in this farm, but no iron relics. A human skeleton was found at the place. This site extends a little way into lot 2 (Chas. H. Moffatt's), but is a distinct site from the one at Mr. Moffatt's house and at some distance from it.

## ii.

In the west half of lot 2, concession 1. Frank Nelson. Some camps occur at a place on this farm, at or near the boundary of Mr. Goss' land (lot 3). Pottery fragments were abundant, and human face pipes in considerable numbers were found in the refuse many years ago, before the place had been much cultivated.

## iii.

On the north-east quarter of lot 2, concession 1. Charles H. Moffatt. (Mrs. Nelson also occupies part of this lot). An important village site occurs in the extreme north-east corner of the lot, covering five or six acres. It includes Mr. Moffatt's garden, and extends beyond it, crossing the boundary into lot 1. It also extends across the road here (second line) into the lots of the second concession. There is a small stream through the adjoining lot 1, and the Indian remains have been found along the south side of the stream. The Indian cabins were placed along the banks of the stream, chiefly, the village being thus long and narrow and accordingly not palisaded. As no iron or other European relics have been found at this site, it probably belonged to an earlier period than that in which there was a misunderstanding with the Iroquois, and hence, there was no great need of palisading. There are numerous refuse heaps here, one of them being two feet thick, and showing that the place was occupied for a long time. Mr. Moffatt has lived here since 1900, and as this village site is near the house, his family has paid close attention to the numerous articles that have turned up from time to time. Bone needles and awls were uncommonly plentiful, some twenty having been found. Other articles were:—Wampum beads (bone and stone, but no shell wampum), a dozen stone axes, clam shell fragments, bears' teeth (some of them with holes for suspension as bangles), teeth of beavers and porcupines, thirty or more stone and pottery disks, many flints, a bone arrowhead, corn grains, etc. The pottery fragments found here are highly decorated, one of the pieces showing a human face as part of its decorations. The pipe fragments of this site well repay a careful study. The clay specimens show an uncommon development of the pictorial art, perhaps not even so much as a single plain pipe having been found, but all being decorated. Here is a partial list of some of the pipes:—

Human effigy pipes in considerable numbers, several of the cornet or flared-mouth pattern, a square mouth specimen (modification of the cornet pattern), numerous specimens of the belt pattern (one of them showing a modification of the basal line of dots into dashes), an effigy pipe (the bowl being the open mouth of a snake, similar to the figure in First Archæological Report, p. 23). The fragments of stone pipes found show also attempts at animal and human designs. At some little distance from this site a bonepit was once found. It probably belonged to this site, although it is unsafe to conclude definitely, because there are other sites within moderate distances of the pit. In 1892, or thereabout, Mr. T. F. Milne, who then taught the Marchmont school, made some little examination of this pit, but found no remains of any importance. There were no whole skulls, and the other bones were saturated with water or otherwise decayed. Altogether, the information gleaned from this pit has been too insignificant to add much to our knowledge; yet, the pit may have been opened many years ago, as the late Wm. Smith, who lived on the next farm north (father of the present occupant, Henry W. Smith), was aware of its existence.

iv.

At the extreme south-west corner of lot 3, concession 2. beside Bass Lake. William Jackson. On a terrace in Mr. Jackson's field the usual pottery fragments and other relics are found. Gouges and arrowheads were numerous. Also on the higher hill eastward, some remains appeared. Beside the road, which passes along the shore of Bass Lake here, some of the immense boulders have mortars on their tops. No iron, or other relics of European make, are reported for this site, although some are said to have been found in one of the bonepits. Part of this site occurs over the line of the adjoining farm, viz., the west half of lot 4, now occupied by Julius Crockford. In the latter farm, there was a large hole in the clay hill, supposed to be the place where the clay for pottery was obtained, as pottery fragments were numerous round about. This hole, the late Richard Rix, who formerly occupied the farm, filled in when he found it. George Rix, now of Orillia town, formerly occupied the farm of Mr. Jackson. On the same farm, some distance north from the easterly end of Bass Lake, R. J. S. Drinkwater discovered a bonepit when the place was in woods. The date of finding this pit was September 8, 1868, as Mr. Drinkwater finds by his diary, which he was kind enough to look up at my request. His knowledge of the surface indications of such pits he had obtained from his grandfather, the Rev. Geo. Hallen, of Penetanguishene. A year or two later, while a camp-meeting was in progress beside Bass Lake, some of those who attended the meeting dug out the contents of the bonepit, which Mr. Drinkwater had left undisturbed. Its position was near the Coldwater road. The late Capt. Peter Lyon, who saw it at that time, informed me that it had a diameter of about twelve feet. Some brass kettles, clay pipes, etc., are reported to have been found in it. When the curiosity-seekers dug out this bonepit, at the time of the camp-meeting, a doctor who was present put together the bones of a skeleton for the edification of the spectators, thus combining anatomical recreation with divinity. A second and smaller bonepit was found near the larger one.

## v.

On the west half of lot 5, concession 1. The Basil R Rowe homestead, now occupied by Chas. H. Rowe. The site is on the lower ground near Bass Lake, and extends across two fields. Pottery fragments, pipes, etc., were found at it, especially a number of years ago. Many stone skinners,\* and French (iron) tomahawks, have been found all over the adjoining fields. Dr. Tache got some of the relics from this site when he carried on his archæological explorations some forty years ago, and these are probably in the Laval museum in Quebec city.

## vi.

On the west half of lot 1, concession 4. Edward Turner. He has found a few relics of the usual kinds, but the village was small. Iron tomahawks have been found in the neighborhood of the site, but none immediately at the place itself.

## vii.

On the east half of lot 1, concession 4, Richard Vanderburg, sr. This place is situated on the east side of a part of Silver Creek, one of the branches of North River. There have been extensive ash beds and refuse heaps, mixed with clay pottery and pipe fragments, but the ground is all cultivated now. Archibald Fyfe, of North Orillia, once owned this farm and lived on it for a length of time. He found various relics while here. Edward Turner, now owner of the west half, also cultivated this land and observed the remains. Iron tomahawks have been found in the neighborhood of the site.

## viii.

On the west half of lot 1, concession 6. Mrs. Emma McPhie and family, who occupy this land, find in their field south of the residence an important village site, the distance being not far to Mud Lake which is also partly on their land. The late Alex McPhie found many relics here, including a few iron tomahawks; and his brother, J. W. McPhie, now of Epworth, B.C., also made a collection at this site. These were purchased in 1884, by Mr. George W. Dryden, of Whitby, Ont., in whose possession they are still preserved. In reply to my enquiries, Mr. Dryden informs me the collection he obtained from the McPhie brothers contains ten or twelve pipeheads (clay) some of which represent the following:—Wolf, owl, snake, frog and human faces. There are also some half-dozen iron axes, beads, wampum, bone needles, stone disks, etc. Mrs. McPhie's sons are close observers of this village site, at which there are numerous deep ash heaps. It extends into the land of Mr. Jesse Ryerson (west half of lot 2). It is worthy of note, that arrowheads made from pieces of brass (probably pieces of old kettles) are quite numerous here, and some of them were very neatly formed. Stone and pottery disks were numerous.

## ix.

On lot one, concession 7. George Annis. This lot is broken by Lake Couchiching, at the shore of which high terraces of former lake

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\* See foot note p. 110.

margins appear. On one of these terraces, Mr. Annis has found pottery fragments, pipes, iron tomahawks, etc. There is higher ground beside the site, so it was evidently not palisaded. The occupants of other farms adjoining this one have found stone and iron axes on their lands, showing this was a rendezvous in early times, as indeed we might expect from the fact that there is a cove in the shore of Lake Couchiching at this place.

## x.

On Chief's Island, Lake Couchiching, a few remains have been found. This island has been a rendezvous for Algonkins, both ancient and modern. After the exchange of the Coldwater Tract for the Rama Reserve in 1839, the island became the headquarters of the Chippewas for a time, as its name implies. Relics from an island in Lake Couchiching (probably this island) are in the museum of the University of Toronto, marked thus:—"169, Two large circular silver brooches, one small brooch, three silver buckles, two horn spoons, two small hawk bells, etc., from a grave on one of the islands in Lake Couchiching. T. W. Harris." (Compare these relics with those from Present Island, Report on Tiny, p. 21). See also Sir Daniel Wilson's article on "Cranial Types" in *Canadian Journal*, second series, vol. 2, (1857), pp. 406-435, for measurements of Chippewa skulls from Lake Couchiching.

Some reefs on Cedar Island, in Lake Couchiching, are sometimes miscalled the old "Indian Fort" by a few people, but they are the work of the ice of the lake at a former higher level.

## xi.

On the east half of lot 9, concession 1. William Harvie. Many camps, where ashbeds were as much as four feet thick, were to be seen here, strewn with pottery fragments, pipe fragments, etc. Iron tomahawks (early French make) and other relics have been found. The site covers three or four acres, and is on the opposite side of the valley of the same stream as the next site, and upward of a quarter of a mile from it.

## xii.

On the west half of lot 10, concession 1. David T. Strathearn. Mr. Strathearn, sr., found pottery fragments and other relics at a place near a water supply, as long ago as 1859, or earlier. At later dates, also, other camps strewn with pottery fragments, etc., have come to light on the farm. The relics gathered included two steel knives. About 1888, Mr. Strathearn found a large mealing stone here (or at the next site), but, unfortunately, it was broken in removal. Three large ash heaps, or possibly more, are still quite distinct, notwithstanding the effects of cultivation.

## xiii

On the west half of lot 13, concession 1. This site is on the north bank of Brough's Creek, beside what was known as Edmondson's or Salter's Mill Pond. (This mill pond was broken down by the flood

of June 5th, 1890, and has not been rebuilt). Before 1889, when I first became acquainted with the site, it had been ploughed two or three times, and remains of camps exposed, strewn with pottery and pipe fragments, and other relics including iron tomahawks. At that time the occupant was Richard Frost.

xiv.

On the north-west quarter of lot 10, concession 3. Thomas Day. Near a stream which flows into Shingle Bay. John Sanvidge, now of Magnetawan, lived formerly on the part of this farm on which were remains. During the time he lived here, copper kettles or pieces of them were found abundantly, also iron axes of early French make. Geo. McKinnell, of Orillia town, obtained twelve of these French axes from this site. Two of them are now preserved in the Grierson Museum, in Thornhill, Dumfriesshire, Scotland. Richard O. Bell, Oro Station, obtained two French axes here on which the triple marks were unusually well defined and large, each tomahawk having a distinct pattern. Large ash heaps, mixed with broken pottery, pipeheads, etc., occur here. Mr. J. H. Hammond, Orillia, giving his recollections of the place in the early seventies, says: "It was on the south side of Barrie road, about a mile and a half out of Orillia, on the edge of the old mill pond between the road and the mill pond. This plot or site would be two or three acres in extent, and it was on sandy soil. In the field where the village site was, a great many remains of the Indians, such as broken pottery, pipes and broken pipe heads, skinning stones and quantities of ash heaps and remains of fires were scattered over the ground. The pipes were ornamented by a sort of basket-work pattern around the head of the pipe and near the top. Some of the pipes had stems, others only the pipe-head with a hole for a stem. The skinning stones were all of a green stone, different from any around here, and were all chisel-edged. I recollect two grooved stones. These had a chisel edge and were large, about nine inches long, a half to three-quarters of an inch thick, and about three inches wide with a depression around the centre, apparently for the purpose of holding the handle. The soil of this village site is red sand, and it is on a level bench, about twelve feet above the level of the water of the dam." (The dam in the stream here is known as Thomson's Mill Pond, and formerly as Dallas', from Fred. Dallas, the earliest settler at the place.) About 300 yards to the west of the village site is the cemetery, with which it was probably connected. This burial-ground consisted of single graves, situated on the Cuppage farm (north-east quarter of lot 10, concession 2.) Nearly all, or quite all, of the graves have been rifled of their contents by curiosity-seekers. From all that can be learned, I regard it as a noteworthy archæological feature. In company with Dr. Jas. N. Harvie, of Orillia, I made a visit of inspection to this aboriginal cemetery on June 24, 1889. A tiny stream, emptying into the larger stream, divided the burial-ground into two parts. About thirty holes in the surface of the ground (presumably graves) were to be seen on one side, and about ten on the other. A tree whose stump showed about 115 annual rings, and had been fifteen years chopped, had grown out of one of the holes, thus

showing a minimum age of 130 years for the cemetery. Yet, this is much less than the actual age of the graves, as some French tomahawks furnish evidence that they were much older, and belonged to the seventeenth century. The ground at the place is sandy, while surrounding parts are clay and gravel. A little west (not above a quarter of a mile) and slightly higher, is the Algonkin raised shoreline. The surface of each grave was depressed below the level of the ground by sinkage, probably; and thus each grave could be seen. It is now close to Thomson's Mill Pond, but at the time of its use by the Indians it would be at the edge of a swamp. It resembles the Coleman cemetery in Oro (No. 41), and belongs to the type peculiar to the early Algonkins, and perhaps, also, to the Arendarrons, the Huron tribe, who were nearest the Algonkins, and were most influenced by their customs. The graves are said to have yielded a few pipes, (chiefly clay), tomahawks (stone and iron), pottery fragments and stone disks.

## XV.

## THE MOUNT SLAVEN SITE.

Indian remains have been found quite extensively in what is known as the Mount Slaven Annex. This is really a part of Orillia town, but the land is not yet within the corporation limits. On both sides of the Mount Slaven Creek numerous remains have been found. For the most part, the plot in question is a large burial-ground. Whether it was the regular camping ground of the Indians who buried so extensively here, or whether their camps were at some little distance, is not very evident. But it is certain that many ashbeds, mixed with the usual pottery fragments, etc., occur here as well as graves, and the probability is that the aboriginal occupants lived right here and buried their friends close to their dwellings. The remains have been found within the space enclosed by the Fourth Line of South Orillia and O'Brien Street on the west and east respectively, and by Mississauga and Lavicount Streets on the south and north respectively. Within this rectangular block is enclosed a space of about 68 acres. Graves and other remains cover about half of this area, which is now partly covered with houses and gardens. Placed as it was on lower ground than anywhere else around it, and occupying both sides of the creek, the sheltered position of this site would make it a desirable wintering spot; and I incline to think it was used for this purpose for a long period. The mixed character of the relics found here tends to confirm this view. For example, French iron axes of the pattern belonging to the seventeenth century, as well as pipe-tomahawks (steel) have been found on the site. The latter are not found on early sites, but occur on recent camping grounds; and they are to be regarded as belonging, not to the French period of Canada, but to the early British period, that is, after 1759. It is probable this camping ground was used in both periods. The settlers in the Mount Slaven suburb find many iron and steel tomahawks of both the aforementioned kinds.

Besides the series of isolated or single graves, which have been thoroughly ransacked for relics by curiosity seekers during the past

forty years. there were at least two communal ossuaries or bonepits. The first of these was found about the year 1870, on or about lot No. 212, south of Mary Street, and thirty or forty yards from the creek before-mentioned. Very few buildings were in that part of the town at the time. A pine tree had partly grown over the pit. A large number of skulls and other human bones were found in it.

A smaller communal grave came to light in September, 1902. Mr. Harry Willey was levelling up his lot on the north side of Mary street, and came across a number of skeletons, ten of which were together, the skulls occupying the small space of two square yards. Particulars of the discovery appeared, at some length, in the *Orillia Packet*, of October 2, 1902. The character of the deposit of bones indicates that the communal idea underlay the placing of them together. At a former time some beads and tomahawks were found with a few other skeletons some yards nearer the street; and again, in August, 1903, Mr. Willey found an earthen pot (Indian make, complete) beside some other skeletons.

As to the question of what kind of Indians inhabited this site, Mr. C. A. Hirschtelder once informed me that he made openings in a few of the single graves some years ago, and obtained some European relics. He concluded that the burials he saw had been of later Algonkin origin. On the other hand, Mr. Lawrence Heyden, Toronto, stated to me his opinion that this was a Huron site, giving as his reason the occurrence of a communal grave, out of which he took no less than 38 tibiæ (shin-bones). This implies that the communal bone pit was a Huron institution only. Perhaps both gentlemen are correct in holding these divergent opinions, as I have mentioned above, the probability that the site was occupied by Indians in widely different periods. Mr. Heyden communicated to me some facts bearing upon these burials, as follows :—

"The ossuary or rather series of ossuaries found about quarter of a mile west of the Orillia Town Hall, contained copper kettles, remains of blades of knives, pipes, pottery as well as stone beads, etc. So any village in the vicinity of these ossuaries must have been populous and post French (that is, after the French arrived in the country, and not after they had quitted the district, when the Hurons dispersed). Hatchets and other remains are frequently found scattered within a pretty large circumference of which these ossuaries might be taken as a centre."

Some persons have advanced the theory that this site was Cahiaque, the town from which Champlain set out in 1615 on his expedition to the Iroquois. The characters of this site forbid the theory, even if we had not Champlain's explicit statement, that Cahiaque was three leagues from Lake Couchiching. In the first place, the relics found here indicate that the site was inhabited at widely different times, which would account for the large extent of ground strewn with remains. Yet, large as the site is, it is doubtful whether it could be the spot on which the 200 cabins of Cahiaque were placed. And still further, it lacks a defensive position, which was essential for a large village or town like Cahiaque. It occupies flat land, with higher ground on two sides of it, and is on both sides of the Creek. A position of this kind was anything but defensive, according to our

knowledge of what other fortified villages are like in the matter of position. The site was probably Algonkin, both early and modern, and not Huron.

While preparing these descriptions of sites, I was favored by Mr. J. H. Hammond, of Orillia, with the perusal of some notes on this site, written by him to preserve some record of the place, as its present condition scarcely admits of making a definite account, owing to the presence of so many buildings. Mr. Hammond has granted my request to publish the following extracts, a favor that will be appreciated by students of archæology and history generally, as there are but few left who witnessed the exhumation of the most important part of the remains about thirty years ago. Mr. Hammond, whose remarks on the orientation of the burials, and other mortuary practices of the Indians who deposited the remains of their dead here, are very interesting, says—"In the early seventies, as a schoolboy, I spent the greater part of some Saturdays and holidays with my playmates in excavating Indian graves on the lots north of the extension of Mississaga street, on Mount Slaven, near Orillia Town. Our schoolmaster (Samuel McIlvaine) urged us to make all available collections of any objects such as beads, wampum and the like. He was making a collection, and utilized our muscles in furthering that object. It was then called the Indian graveyard. These excursions lasted over three years, and were pursued by us every convenient Saturday during the summer seasons.

"The graves were single and extended in (four) lines from the bank of the creek toward the hillside at the Coldwater Road, in a north-westerly direction. All of the bodies were buried in a sitting posture, facing the east or morning sun. In every case we came on the skull first. The hands and arms were always in front of and crossing the leg bones.

"In only one case were there more than one body in a single hole. In this case the bodies were laid flat, head and feet regularly. This hole was oval, about fifteen feet long and seven or eight feet wide, and placed between the second and third lines of graves, twenty or thirty yards from the bank of the creek. In this big grave we found a large quantity of wampum about the size of a ten cent piece, with a drilled hole in the centre of each piece; some round blue beads; and some red beads of a bugle shape, an inch to an inch and a half long, pierced like the others. Also, a quantity of flint arrowheads and spear heads. No iron axes that I remember, though we had plenty of them from the neighborhood.

"In only one case was any kettle found, and this was southeast of the big grave, on a level place about half way down to the water edge. It was upside down and under it was a large quantity of thigh bones, which were in no case broken. These had been boiled or were in the process of being boiled when the kettle was upset and the fire put out by the liquid in the pot. On top of this pot a big pine stub was standing, and the main root of the stub ran down in the earth until it reached the bottom of the kettle, and then grew around the surface of it. This stub would be at least two feet through, and we had to cut through the big root to free the kettle before we could get it out of the hole. Underneath the kettle and bones, as above



described, were the remains of the fire, some of the wood partly burnt, some burnt to coal and some to ashes. This kettle was brass, and had holes for the bail. The rim was flared, and was of the same material as the pot itself. It was about two and a half feet across the top and about twenty inches deep. The bail holes were about an inch and a half in diameter, and about half an inch from the edge of the pot. Inside of the pot was a collection of green matter, hard and sticking fast on the pot when we found it. The surfaces of the bones were of a brown yellow color; no marks upon them. Underneath the kettle the ashes were bright and clean; no trace of any rotted flesh, only pieces of charred wood and coal and ashes underneath the bones.

"The graves were in a succession of lines about twenty feet apart each way, and apparently followed a fixed plan of burial. There were, at least, four lines of graves, (possibly more), and they extended through the sand (a coarse grey and well-drained sand) to the gravel under the hill at the Coldwater Road. The ground was nearly level, having a slight upward trend toward the Coldwater Road or Trail, a distance of a quarter of a mile or more. The ground had at one time been cleared of trees, for the trees were nearly all of one size, viz., about a foot through, while the woods on both sides of the graveyard were larger and contained pine trees, some large, others smaller. There were a few butternut trees along the edges of the graveyard, but none on it. The spring creek, which ran to the east and south, had cut a channel from fifteen to twenty feet deep below the level of the graveyard, and it was at this time a running stream all the year round.

"One of the graves that we excavated was of an exceptional character, as the bones were of an enormous size. The skull was intact, with the exception of a break in the middle of the crown. This was two or three inches long, and about half an inch wide, apparently made by a blow with a blunt axe or pointed stone. The cut ran from the back toward the front of the skull, and was widest at the middle of the cut tapering to a point both ways. The lower jawbone of this body was in place, and I tried it over my own head and face, and it passed clear of my face, without touching it at any place. Our schoolmaster measured the thighbone of this body on his own leg, and it extended beyond his knee several inches, and he was a tall man, too. We found in this grave a quantity of hair, black and long, apparently attached to what we then thought to be a scalp. This was on the knees of the body. I also got out of this grave a black amulet shaped like a bird, which had apparently hung on the breast of the man in life. It was of stone, polished and perfect. We also got some flint arrowheads out of this grave, but nothing else that I can recollect."

xvi.

On the west half of lot 6, concession 5. In the north and highest part of the Town of Orillia, numerous remains have been found along the brow of the Algonquin shoreline. The relics found on this high ground site belong more distinctly to the early Huron period than do those of the Mount Slaven site. The Huron forest

trail appears to have passed along the brow of the ridge here. The following list of some of the remains found is only a partial one:—In the woods on a lot belonging to Lawrence Heyden, Toronto, east of the upper end of Peter street, partly within the town limits, there were found several hatchets. At another place in the vicinity of the same, numerous pottery fragments were found, at a short distance from a spring, as Mr. C. H. Hale informs us. On a lot on Matchedash street, sold by Lawrence Heyden to the Rev. Mr. Creighton, there were found, on clearing off the surface stones, a human skeleton with a hatchet (French, of the early Huron period) lying beside it. In the spring of 1903, F. Webber, lot 25, North Borland street, found a string of wampum (55 beads) while digging a celery trench in his garden. C. E. C. Newton, Esq., found in his garden on Borland Street, near the High School, in August, 1903, a fine brass crucifix, 5 inches long and well preserved. In the *Orillia Packet*, of July 16, 1903, A. C. Osborne describes a St. Bartholomew medal, bearing the date August 24, 1572, which W. J. Powley found near where the Coldwater road ascends the ridge. All these finds, and many other similar ones, in the highest part of the town, indicate an extensive occupation and travel here, in the early period.

## xvii.

On the old Asylum ground, now the Park, in the town of Orillia (parts of lots 7 and 8, concession 5). This was a prehistoric site or landing, as well as a noted camping-ground for Indians as late as the time when the first settlers came to Orillia. Iron hatchets have been, and are being turned up.

## xviii.

On the west half of lot 21, concession 1. William Anderson. Members of Mr. Anderson's family have found stone axes, clay pipes, pottery fragments, an iron tomahawk, etc., at a place near their boat-house. One of the pipes was of the belt pattern, an early Huron type. The site is at the west end of the portage across the neck of land at Carthew's Bay. The Indians use this portage to the present day, the trail passing across the neck on the north side of the swale which occurs there. Modern Indians carry their canoes across this neck of about 25 rods, rather than paddle round the point (Eight Mile Point), a distance of more than a mile around, and also exposed to winds. The evidence at hand also shows that Indians at a very early period preferred to do the same.

Local newspapers of June, 1888, mentioned the finding of a human skeleton (supposed to be an Indian's) with coins of about the year 1800, at what was called Cameron's Point, two miles to the eastward of this portage. The action of the waves had washed the skeleton partly out of the bank where it had been buried. It proved, however, to be the remains of an old trader, who carried on his traffic among the Indians at an early date. When he died they buried him in his old butternut canoe. There were brass buttons on his coat by which the remains were identified.

## xix.

In the central part of lot 12, concession 3. Now the grounds of the Provincial Asylum for Idiots, near Orillia Town. The position of the place is at the north-west part of Shingle Bay, where the land rises high above the lake level. There was a landing here in the time of the aborigines. The late John Burkitt lived here in former years and found numerous relics, especially many pottery fragments, etc. Mr. Burkitt's name appears in early Assessment Rolls (1858 and later) as owner of the whole of lot 12. And Mr. C. H. Hale informs me this was known as Burkitt's farm after 1868.

## xx.

On part of lot 11, concession 6. F. S. Smith. Numerous relics have been found on his farm, which is on the shore of Monk's or Smith's Bay. A favorite landing-place of the Indians existed here from early times. Metal tomahawks have been found, indicating the occupation of the place during historic times; but there have been also relics found of prehistoric dates. Several years ago, on the narrow tract of land between the two lakes (Simcoe and Couchiching) many stone axes were found. The place was near the Atherly Road, on the way to Invermara, and also near the bay just mentioned.

## xxi.

At Invermara, in the grounds of Orchard Point House (summer resort), formerly the Red Cross Hospital, which is the property of Mr. J. P. Secord, Orillia. A paragraph appeared in each of the three Orillia newspapers of May 1, 1890, mentioning the finding of a human skeleton, with accompanying Indian relics, and also other articles in the vicinity of the find. There were numerous prehistoric, as well as recent relics, the remains thus belonging to all periods from the earliest downwards. Beside the single skeleton (apparently a woman's) there were some stamped out metal ornaments; three brooches, a double-barred silver cross, about four inches long, with "Montreal" and the maker's mark upon it. At a little distance away were found fragments of roughly ornamented pottery, clay pipe heads, stone axes, a bone disk, etc. The relics found with the skeleton indicated that it belonged to a comparatively recent period; but the clay pipe-heads and fragments mostly belonged to the early Huron period. The latter included a Huron flared pipe (plain), six belt pattern pipes, and five images from pipes (an owl's head, a hawk's head, the head of another bird, a nondescript image, pig-nosed or wolf-nosed, and a human face). The foregoing relics indicate various periods of occupation of the site, as we might expect from the fact that the fishing station at a little distance north, and, in fact, along the entire length of the Narrows, attracted Indians thither at all times.

## xxii.

## FISHING STATION AT THE NARROWS.

Remains of the fishing station and fish weir of the Hurons at the Narrows. The position of the old weir is north of the present bridges and south of the old railway bridge. In 1887, the late Joseph

Wallace, sr, a local archæologist, of Orillia, identified this as the fishing station mentioned in Champlain's Journal (1615), at the time when he had extracts from that Journal printed in the *Orillia Times*. (See Champlain's Works, Vol. 4, page 34). Mr. Wallace also contributed an article on the subject to *The Canadian Indian* (Sault Ste. Marie, Ont.), and it appeared in the issue of that periodical for February, 1891, pages 134-138, under the heading "A Fishing Station of the Ancient Hurons Identified." Owing to the rarity of that publication, it is worth while reprinting here Mr. Wallace's words in reference to the fish stakes. After some general remarks on the object of Champlain's expedition, he says :—

"The Narrows presents much the same features as in Champlain's days. But its fame as a fishing ground has long vanished; bass may still be caught with the rod, or trolling; and in the winter season, some scores of Indians and whites may be seen spearing herrings through holes cut in the ice. Still, there is no doubt that at the time to which reference is made, all those lakes were literally swarming with fish. Are there any remains to point out the exact locality where these stakes crossed the strait? In answering this question in the affirmative, I would state that some years since, my friend Gilbert Williams, an Indian, informed me that he had seen very old stakes which were used by the Mohawks for catching fish. Some time after, when I was writing out the story of Champlain for one of our local papers, I was conversing with Charles Jacobs on the subject, who said he had also seen the stakes, and further, that the locality was known to this day as "mitchekun," which means a fence, or the place which was fenced or staked across. He said that if a strange Indian were to ask him where he came from, he would answer, "mitchekuning," the termination "ing" signifying "from," that is, from Mitchekun. We were, at the time, standing on the Orillia wharf, and within sight of the end of the Narrows. Charles Jacobs said, ask old Mr. Snake (who was standing near by), where Mitchekun is. As soon as I asked the old man, he turned and pointed to the Narrows, which was between two and three miles distant. In September, 1886, I walked down to the Narrows, and entered into conversation with Mr. Frank Gaudaur, who is of Indian extraction, and the keeper of the Midland railway bridge, who immediately took me to the side of the bridge, and only a few paces distant, and shewed me a number of the stakes which remained. Dredging the channel for the purpose of navigation had, of course, removed the greater part of them, only those on the outside of the dredged portion being left. Mr. Gaudaur said that there were some other places where stakes might be seen, but that this was the most complete part. The stakes as might be expected, were a good deal twisted by the current, but the ends were still close together, and firmly embedded in the clay and mud at the bottom, so that it was only after considerable pulling with a spear, that one was brought to the surface. The stakes would be about five or six feet long, and thicker than a walking stick. It is to be observed that they are not placed across in a straight line; indeed, one portion is continued in a direction half-way down the stream, and would thus produce an angle when the line was changed upwards, and at the opening of this angle would be placed the net; and this is in exact accordance with the

method which Champlain describes, when the Indians were hunting deer; that is by staking out a large space in the woods, with an angle into which the game was driven. It is not difficult to account for the stakes lasting for so many years when we consider that the tops were under the surface of the water, thus escaping the action of the air, and also that of the ice, which in this locality is never of great thickness because of the rapidity of the current. It must be understood that we do not assert that these identical stakes existed there in Champlain's time, although it is possible that some of them may be part of the original construction. It was probably used for fishing purposes long after the time of Champlain, and even after the destruction of the Hurons, for I am strongly inclined to suspect that a portion of the Mohawks settled down on the vanquished territory, and remained there a considerable time. If such was the case, the fence would be repaired from time to time, as circumstances required, without altering the site to any material extent. The stake which I had, had been pointed with an axe of considerable sharpness, as evidenced by the comparatively clean cuts made in the operation. Our present Indians, who are Ojibways, know nothing about them, except the tradition before mentioned. Mr. Snake is an old man, and he stated to me that the old Indians, when he was young, referred the whole construction, and its use, to the Mohawks. I have no doubt, if they are not molested, the remains will be in existence a century hence."

A paragraph in the *Orillia Packet* of June 21, 1889, affords some further information upon the important fishing station:—"During his stay here, Mr. A. C. Osborne, of Penetanguishene, accompanied by Mr. Joseph Wallace, sr., visited Mr. F. Gaudaur, and they made a most interesting discovery. A copy of Champlain's journal describes the method by which the Indians took fish in 1615. They had rows of stakes driven into the bottom of the Narrows, in such a way as to corral the fish in passing from one lake to the other. In this manner enough fish for the commissariat during the expedition in which they engaged against the Iroquois, were taken in five or six days. When this part of the journal was read to Mr. Gaudaur, he took his visitors to where the rows of stakes could be seen under water. The Ojibways, he said, found these stakes there when they came a hundred and fifty or eighty years since, knew what they were for, but did not use them. They were in large numbers, and at one time extended quite across the Narrows, but very many were thrown out in dredging the present channel. The stakes are of tamarac. Mr. Osborne secured two—one had evidently been put down to replace another at a date subsequent to the other, which was soft, like cheese, when pulled out. The top is desiccated, and is covered with slime. Though only some six inches were visible they extend a long distance into the mud. Mr. Osborne believes that the older stick is one of those there when Champlain encamped at the spot. Mr. Gaudaur says that these under-water "fences" probably suggested the Ojibway name of Orillia, or the Narrows—Michikaning; "The Place of the Fence."

Following the publication of the foregoing paragraph, the present writer communicated a letter to the *Orillia Packet* of July 5, 1889, suggesting that the early French name of Lake Simcoe, viz., Hurdle

Lake, (Lac aux Claies), was derived from this fishing contrivance at the Narrows. C. C. James, M.A., made a similar suggestion in a letter to the *Toronto Globe*, May 26, 1896. And in a letter to the *Orillia Packet* of April 2, 1903, Aubrey White, Deputy-Minister of Crown Lands, Toronto, also suggests, or rather points out as an established fact, (though without citing any authority,) that the early French adopted the idea of the name Hurdle Lake from the same Indian fish fence. These three suggestions appear to have been made independently of each other, making the validity of the suggestion very strong. [See also Gen. John S. Clark's article in Ontario Archæological Report for 1899, p. 195.]

A. F. HUNTER.

BARRIE, December, 1903.

### IROQUOIS IN THE NORTH WEST TERRITORIES.

In the last Report on Indian affairs issued by the Hon. Clifford Sifton, Minister of the Interior, Ottawa, a reference was made by Mr. James Gibbons, Indian agent, at Edmonton, Alberta, to some natives known as Michel's Band, the original members of which were said to have come from Quebec. The statement was singular enough to arouse some curiosity, for although instances are known respecting the appearance of individual Indians, hundreds, or even thousands of miles away from their original homes, it is quite unusual for these people to remove voluntarily, in a body, so far away as Alberta is from the Province of Quebec.

A letter of inquiry addressed to Mr. Gibbons, respecting the statement, brought a note from him to the effect that "the members of Michel's Band are the children and grand-children of two brothers Michel and Baptiste, who came originally from near Montreal" (probably from Caughnawaga) and, that as he was about to visit the band in a short time, he would try to procure more detailed information, and let me know the result. In accordance with this promise Mr. Gibbons has very kindly written the following interesting letter :

INDIAN AGENT'S OFFICE,  
EDMONTON AGENCY, NOVEMBER, 24th, 1903.

DEAR SIR,—I am now able to give you some information relative to Michel's band and their connection with the Iroquois Indians of Eastern Canada, about which you asked in your letter of July 24th last. Chief Michel Callihoo, now an old man of over seventy years, says his father came to this country at least a hundred years ago. He can remember his father saying, that his tribe lived across the river from Lachine. As he was speaking to me through an interpreter, this may be looked on as settling the locality of the band, the name of Lachine not being at all familiar here. The Iroquois name of his immediate family is Carr-e-heoo\*, and is trans-

\*I have submitted this word to the judgment of Mr. F. O. Loft, an educated Mohawk, in the Ontario civil service. He agrees that the meaning of the word is correctly given, but suggests that the spelling should be Kal-he-yoh, or Kar-he-yo, Gar-he-yo. In pronouncing the word there is a semi-guttural at the end of the first syllable, which Mr. Loft thinks is best represented by l. The usual difficulty occurs in this word as to k, and hard g, when pronounced by an Indian.

lated A Fine Forest. Some twenty-five years ago he met some of his tribesmen from the East, who told him that many of his name were still there and that his cousin of that name was chief of the Wolf tribe of the band. The party who immigrated to this country consisted of about forty men, no women coming. They had learned, he said, that fur-bearing animals and game were abundant, probably from Hudson's Bay Company's people. Arriving here they appear to have connected themselves with one of the fur companies, of which he says there were three. In pursuing their calling they appear to have ventured out on the plains, an act of temerity that cost the lives of eighteen of their number at the hands of the Blackfeet who then ruled the plains. After this disaster, the majority appear to have gone up to the Jasper Pass country, and though I hear of them occasionally, they are outside my field of enquiry.

The father of Michel entered the service of the Hudson's Bay Co. as a boatman, and in that calling made trips as far east as the Lake of the Woods. He married a French half-breed woman. I can only find that he and one brother left any descendants here. Thirteen families, numbering sixty-six individuals, can trace descent from one or other of these brothers, and, as no women came with the original immigrants, it is obvious that the Iroquois blood in this generation is attenuated to the vanishing point. They have lost their language, and if they retain any tribal characteristics they have become so feeble that the ordinary observer of Indian manners is unable to discern them. In appearance, habits and social status, they are undistinguishable from the half-breeds of the country.

This is the book of the Lost Tribes compiled by one unaccustomed to ethnological research or historical analysis, and, while it will not add much to the sum of your Indian lore, it may supply you with clues to prosecute a more satisfactory enquiry.

Yours truly,

JAS. GIBBONS.

### THE KILLING OF MOOSTOOS THE WEHTIGOO.\*

During the winter of 1898-9 a band of Cree trappers camped at Bald Hill, on Smoky River, about 75 miles west of Little Slave lake. This band was under the leadership of Entominahoo, who, although not a "chief," was looked up to as a Medicine Man of considerable authority. Other members were Chuckachuck, Napaysoosee, Napay-sis, Payoo, Moostoos or Louison, Mihkooshtikwahnis, Apishchikisaynis, Little Felix, Mikisyoo, Kunuksoos, with their families, all of whom were accommodated in two shacks, and four tepees.†

Towards the spring of 1899 several of the band became sick. One of these was Moostoos, who convinced himself and others that he was about to become a Wehtigoo, or, what is known among Algonquin

\*For the Court copy of the evidence from which the extracts are taken, thanks are due to Mr. John R. Boyle, of the firm of Taylor & Boyle, solicitors, etc., Edmonton, who very properly regarded the evidence elicited as likely to prove interesting to ethnological readers.

†Shacks, roughly built houses—tepees, wigwams or tents of cloth, or of skins.

tribes farther east as a Wendigo\*, or, Wentiko, which is, to, say, "one possessed." He declared that when the change came he would kill his children and "clean out" everybody else, unless his friends would first put an end to him. This they did, and what follow are extracts from the evidence given by the men and women of the band at the trials held at Fort Saskatchewan and Edmonton, Alberta, in connection with the case, which is, perhaps, unique in British jurisprudence.

Nothing presents more difficulty than the *extraction* of information on any subject, even with the assistance of a good interpreter, from Indians, so strong is the tendency on their part to offer such replies as the nature of the question seems to suggest to them.

The extracts being presented here as an ethnological, and to some extent, as a psychological contribution rather than as a legal one, they are not given in the order of presentation at the courts, and, for the same reason, by far the larger portion of the evidence is omitted.

The first court was held at Fort Saskatchewan, and the second at Edmonton, so that some of the witnesses were examined twice, but the variations as well as the agreements in their evidence, are not only interesting but edifying.

#### QUEEN vs. PAYOO AND NAPAYSOOSEE.

##### CALLED BY CROWN.

ELIZA (Kunuksoo's wife), said:—

Last saw Moostoos near Bald Hills. Was not quite dead when I saw him. Do not know if anything was the matter with him, He was in a shack. Do not know if others were there. I was not well. I was in the shack when he first took sick. All at once he told the people that he was going to kill them all that night. People there were 1, Entominahoo; 2, Kunuksoos; 3, wife of 1; 4, wife of 2. Don't know who else. Was too scared that Louison (Moostoos) was going to kill them. I am cousin of deceased. Payoo is my relation. Napaysoosee is my cousin. He (Moostoos) was moving all the time and a lot of them holding him down. He was lying down. Holding him were Napaysoosis, Chuckachuck, and I myself holding him by leg, and praying at same time. Mayaskwaysis holding other leg. He was trying to bite Napaysoosis. Payoo then struck him. I saw Payoo coming into the shack while we were holding him down. After Payoo struck him I went out. Struck him with an axe. Don't know what part of the body; was not looking. Saw him swinging the arms to strike. I did not hear anything said. Deceased said, "You will all die to-night if you don't kill me first." Don't know of him saying anything else. Don't know if he cried out when struck. Don't know how long Moostoos was sick. Don't know how old Moostoos was. Did not belong to the same band. Came from Sturgeon Lake. Napaysoosis used to be at Sturgeon Lake. Don't know where Payoo belonged.

ENTOMINAHOO said:—

I am not chief, but am recognized as head man. Deceased came in winter. Not sick when came. He was a fine man, and all of a

\*This name is applied to the "spirit," as well as to the affected person.



sudden we took notice of something wrong with him. Just about the time this happened, he said, "there's going to be something wrong with me." He said, "If I go wrong you had better kill me so that I may not do anything to my children."

Then in the evening we saw that he was thinking something wrong about us. After he said that, he was moving about and I took hold of his wrist to quiet him, and he threw me off like a child. In this form of sickness they struggle very hard. Got hold of him by one arm again to try and hold him and sat down beside him. Payoo was not in the house at the time. Napaysoosee and Chuckachuck wanted to hold him down by the shoulders. Then Payoo came in. I did not notice him come in. I was sitting close to his feet. Saw Payoo strike deceased with an axe. Don't know where he got it. Can't say where he struck him. I think in the head end of the body. Saw the axe falling but not actually strike. Saw it strike, but was dark in there and could not see just where it struck. Saw no blood. Moostoos nearly got up after the blow. After that Napaysoosee struck him on the breast with axe. Could not say which side, or whether in back or front, same axe. He was quiet then, and we all went out soon after and went to other house. Napaysoosee came running to house where I was about noon next day, and said "That man is moving—is rising up from the ground." I went there and saw. A blanket was over the body, and legs were all I saw, as he did not move; if he had, we would all have died of fright. Did not lift blanket. I saw Payoo tie deceased's legs to pickets and with trap chains the night of killing. It was not the chains that caused the swelling but the evil that was in him. Left body there and came away, shutting the door. The whole party went to Lesser Slave Lake, think the same day, but not sure, and on the way met Corp. Phillips and reported matter to him. Napaysoosee and Chuckachuck went back to camp with Phillips. My wife, Eliza, and Felix's wife were there. Kunuksoos and wife not there. I was sitting much of the time with my back to deceased, and may have missed seeing what women did. I saw Eliza striking him with a cord. Did not see other women do anything. I did not hear deceased say anything while we were in there. I was afraid he was going to kill us. The reason I was afraid is, because we hear from all over often that a person like that cleans out the whole of the people, does not leave one. The man was going to be a Wehtigoo, look what he said about his own children. I never saw a Wehtigoo before, but that is what I have heard. We had nothing to tie up a man with. They say that a Wehtigoo is immensely strong.

MARIE, wife of Entominahoo:—

Was in shack, saw Payoo strike deceased with an axe. Chuckachuck struck him too with an axe. Napaysoosee too. Don't know if the women struck him. All struck him towards the head. Did not see where Payoo struck him. Payoo struck him. Chuckachuck next. When Chuckachuck struck, Napaysoosee was standing towards deceased legs at left side, far side from door, and was standing in same place when he himself struck. Moostoos said, "I'll make an end of you all to-night, if you don't kill me." Chuckachuck and Napay-

soo-ee both holding him on left side, Eliza was towards the feet standing. Eliza whipped him. Could not say exactly how often, twice certainly on the breast, being then standing at his head. Did not see Felix's wife doing anything to him. It was Payoo killed him. Chuckachuck struck just once after Payoo. Napaysoosee struck some time after. Deceased stopped moving after Payoo struck him. Chuckachuck struck for nothing. I was so afraid I did not know whether I was alive or dead.

NAPAYSOOSEE said :—

It was on Smoky River, one day's march from Lesser Slave Lake where this occurred. Apart from deceased there were thirty-two people there, last March. Had been there all winter. Two small houses and four teepees. All were Crees. Deceased's (whiteman's) name was Louison, about 40 years old or a little under. He was a Beaver. He came there about the middle of winter from Sturgeon Lake, a little after the New Year. He spoke Cree. Always good friends with him. Louison's wife and children were with him there. I and other prisoner, Payoo, are both baptized Catholics. Some of the band were not. Those who were Catholics went to Lesser Slave Lake to church. Some were Pagans and did not. Moostoos had three children. Moostoos lived in a shack and his two brothers-in-law with him, both married, named Chuckachuck and Apishchikisaynis. Each had one child. Three men, three women and six children in the house. We had no chief, but an old man named Entominahoo, "The little Hunter" was looked upon as our leader, through the Hudson Bay Co. He was a Pagan.

About 5.30 one day Moostoos would not eat. It was not yet dark. He was acting differently from what he ever did before. He wanted always to see me and to be with me. At last he would not speak to me at all. He was excited and seemed to float above the earth. The last time he spoke to me, no one had done anything to him till then, and there was nothing to keep him down, he said to me, "This night all of you in this house are going to die." He had been getting worse all day long. I took hold of him with Chuckachuck and two women, and held him down. He tried to bite me in the arm, but only tore my clothes with his teeth. One of the squaws named Eliza held him by the leg. She took two cords from her girdle and struck him in the face with it. The other woman with a file stabbed him in the breast. His brother-in-law struck him in the face with a hatchet. When struck in the face by the woman, the blood came from his face. After being struck with the hatchet he did not move. I then took the hatchet and struck him in the right side, but not hard, and also with the knife in the bowels. After the woman struck him with the cord, he was breathing very hard, and then the blow of the hatchet broke in his head. The reason we struck him was because he had threatened to kill us all. It was to save our lives. We were all foolish with fear. Next day they told me to cut off his head or he would come back. I refused, but at last I consented and said if you are not afraid of causing me to die when you force me to do that, and I did it. It was in the house where he was lying. A number were there and saw it done, but I alone did it. They told me to fasten his legs



with a chain and I did so. We were all crazy with fear, and when we found out what we had done, we left the place and left him there. I drove a stake through the hole where I had struck him in the side with the hatchet.

Moostoos said at Sturgeon Lake he was going to turn Wehtigoo, and we had heard this and were afraid of him. It is our law to kill a Wehtigoo. Moostoos had said to his wife, "I am going to go Wehtigoo, I don't want to do anything to my children, it is better that they should kill me."

Napaysis being sick, the men all were sitting round Napaysis, and Moostoos was there. He was not then sick at all, and all at once he commenced to speak of all kinds of things. He looked all around and said, "How would it do, if I should eat the little ones, and especially their noses?"

Among our own band I never saw or knew of a Wehtigoo kill and eat any one, but I have heard of it often.

While Moostoos was bad sick, he floated up right off the ground, and when I caught hold of him, it was hard to reach up to seize him. He was very strong, and we had hard work to get him down and hold him down. He was a small man.

NAPAYSOOSEE said:—

Cannot understand why the others swear that Payoo struck the first blow. It is not true. Eliza ran a two-pointed iron instrument into Moostoos' leg the next morning, after he was killed. At the time she whipped him in the face, she had in her hand besides this cord, an axe. She was singing and calling out. Eliza struck him often over the face with the cord, and I saw the blood come through the blanket which was over him. I saw Eliza next morning burning the cord to ashes with which she had struck him. The one she showed in Court was not the same one at all. Mihkooshtikwahniss was making medicine and trying to make him well, but he could not manage him, he was too much for him and I sent him out of the shack. There were small sticks planted and the men and women were singing, making medicine all but me, I was not. We were all sitting there all night after he was killed. I took his head off with an axe on the next day. It was not daylight yet when Entominahoo's wife poured hot tea into his breast. Don't know who put stone in of which you say Payoo speaks. Don't know of it at all. Payoo and I helped another to drive in the stake. Entominahoo was the chief medicine man of the band. The tying of the legs to the stake was done by me and Entominahoo's wife. She tied one and I the other. This was before daylight. The tea was brought from the other shack in two small kettles. Think it was Entominahoo's wife who suggested it. All the day before I thought there must be ice in him to make him sick that way. I thought that if the ice was allowed to stay there, that the evil spirit could not be killed out, and I suggested the hot tea.

The other man, Napaysis, was going that way too, but he was sick weak, and it was not hard to subdue him, but we could not do anything with Moostoos. I think it was Chuckachuck who called

out "Come and see this here." Eliza handed the axe to Chuckachuck that he struck with, but she may have struck with it first, although I did not see it.

**PAYOO:—Statement made May 6th and 15th.**

I was in the shack sitting with the women, when they called to me, I went to the house where Moostoss was. As I entered they cried out to me, "Strike him first or you will die." I struck him with the hatchet too, but he was already dead. Napaysoosee told me to strike him with the knife too.

We poured the tea over him because his body was full of ice in the house.

When I was called, to go to strike Moostoos, his wife said to me "kill him thoroughly, for he will come to life." When I went in the people there were Napaysoosee, Chuckachuck, Kunuksoos, Kunuksoos' wife Kiakichihowasoo, Little Felix's wife Mayaskwaysis, Eliza wife of Mihkooshtikwahnis, Entominahoo and his wife, and Apishchikisaynis, with a blanket over his head.

They are lying when they say I struck the first blow. They are all related to one another, and I am alone among them. When I went in the man was dead, and no one was holding him. A blanket was over him, and some were holding on to the corners of the blanket. Kunuksoos' wife was one of them. I did not notice blood on the blanket over his head, but an axe was sticking in the body, and a knife was planted in his body. It was Napaysoosee's knife. Next day I saw an axe with blood on it, and recognized it was Eliza's by the handle. I saw her take it and hide it. I saw Napaysoosee cut off the head with an axe the next day. Next day there was a hole in the body where the axe had been sticking, and Napaysoosee told me to hold the stake over the hole, and he struck it but it would not go down. Then Napaysoosee told me to hold on, and he took the stake made marks on it with charcoal, and used some medicine words which I did not understand, and when he struck it, it went right down through. Napaysoosee is a medicine man. Entominahoo and his wife, and Felix's wife were there too. The last thing was the cutting off of the head.

Napaysoosee, Chuckachuck, Entominahoo and Mihkooshtikwahnis were all medicine men, and they were conjuring, having small sticks planted in the ground beside him, and were conjuring and chanting for a long time inside, singing and drumming. Eliza was singing. Mihkooshtikwahnis failed to make medicine and they sent him out. The sticks were taken away next morning. Napaysoosee told me that when they were holding Moostoos down and trying to make him better by medicine, he threw Mihkooshtikwahnis to one side, and the other men sent him out saying his medicine was not strong enough. When Mihkooshtikwahnis came into the shack where I was, he told me that Moostoos's medicine was stronger than his, and added "He's going to eat me now."

When I struck, Chuckachuck said, "Take care you don't strike that axe," pointing to the axe which was sticking the body. Napaysoosee heard this.

Next day Napaysoosee drove a big file into the body, and also put a big stone into the body.

Entominahoo always had a willow stake to use in conjuring, and used it this time.

Entominahoo's wife and Napaysoosee told me that Moostoos had a lump of ice in his body which had caused his madness, and that they were afraid the ice was not melted, and he would come to life again. All the people were there, and we had been there all night watching to see if he would rise at sunrise. They would not let me go out. It was a little after midnight when he was killed. Naypaysoosee forbade me to tell all this. Entominahoo's wife poured hot tea into him. Entominahoo saw everything that was done. It was quite light, there was a big fire, as it was very cold outside.

Napaysis was going to turn Wehtigoo first. All of the people were sitting close up to Moostoos.

The medicine men always help one another. It is a rule of their order.

KUNUKSOOS said:—Moostoos was my son-in-law. The shack where he was killed was Entominahoo's. Moostoos was beginning to be queer when he came into that house about three days before he was killed, but was not sick in that time. I was living in a tepee. His wife and children did not move into that shack with him. Napaysis was dying and we were all in there watching him. I was there all that time taking care of Napaysis. Throughout the last day noticed Moostoos acting queerly. His eyes and face were not right. His eyes were moving fast and he was not the same at all. The night before he was killed, he said, "I am going to be wrong—I hate to destroy people." The summer before he said to me "I would hate to destroy my children, but I am thinking about it." The night he was killed, he said "If I am able, I will clear you all out to-night." At that time Napaysis was lying down and watching him. Moostoos was in another part of the house, lying down, and others around him. Don't know whether they were holding him or not. I did not look or see who were holding him or how. My back was to them, and I sometimes turned my eyes around, I saw a blow struck, Saw three blows struck with the axe. Before Payoo came in someone in the shack called, "He is going to overcome us." There was a blanket over Moostoos' head when he was struck, but I could see the outline of the head under the blanket. A minute or two elapsed between the first and the second blow, cannot say how long between the second and third. He did not move after the first blow was struck so far as I could see. He had been struggling hard and crying out before he was struck. Before the blows were struck, I saw Eliza beating him in the face with the cord. I am sure, from what I heard Moostoos say, that he was a Wehtigoo and was going to kill us all.

I understand a Wehtigoo to be a man possessed by an evil spirit, who kills everybody around him and eats them. Have heard that the people always kill a Wehtigoo.

I don't know what else we could have done to prevent Moostoos killing us. I believed we all had to die. Never heard Moostoos' wife say anything about it. She seemed to take the killing of her husband as a matter of course.

ENTOMINAHOO sworn, said:—I knew Moostoos, and I know Payoo and Napaysoosee. It was near Spring I last saw Moostoos. I saw him in a house. People present were Napaysoosee, Payoo, Napaysis, myself and wife Eliza, another woman, don't know name, Chuckachuck, Kunuksoos, not sure of wife. Nothing wrong with Moostoos. Was in my house one whole day. He died by getting a blow. Who gave it? Chuchachuck. Napaysoosee gave him a second blow. Payoo gave him a third blow after a little time not at once.

Chuckachuck killed him because he (Moostoos) wanted to kill the whole of us. They were holding him, Napaysoosee, Chuchachuck and a woman. Eliza was not holding him. I tried to hold him myself by the arm but he threw me to one side. If they did not hold him down they were frightened he would turn round and kill them. Moostoos had said to me "Uncle, if you don't cure me, I may kill you all and do something to my children" I tried my best to cure him. I used my medicine and had a little conjuring tent and had him in that. After we found we could not cure him, we got holding him because we feared he was going to kill us, if we did not master him. He said, "If I get up from here, I'll kill you all." He said before we held him down, "If you don't hold me down, I'll kill you all." He said that twice. It was only I that heard him say that before they got hold of him. He and I were alone, in the morning. I then tried to cure him with the medicine. It was late at night that we commenced to hold him down. Nothing wrong with him in the daytime lying asleep. *By his movements*, we took hold of him. He was going to jump up. Nothing was said about killing Moostoos.

Payoo gave the blow as soon as he came in. He was not moving very much when Payoo struck him. Payoo knew beforehand that Moostoos was going to do something. Can't say if I told him that. Some time between second and third blows. A few seconds between each of the strikes. Moostoos was moving when Napaysoosis struck him. He was moving when Chuckachuck struck him. Chuckachuck struck first. Napaysoosee second. Payoo third blow. The first blow killed him, but he was moving until after the third!

When Moostoos was being held down, we thought he was going to kill us all, because he said he was going to be a Wehtigoo. A man like that uses his spirit or his hands, anything he can lay hold of. We are all poor and had nothing strong enough to hold him. It was at night and we did not think of tying. When a Wehtigoo gets up he cannot be mastered. We thought it was no use trying to tie him. There were seven men, but three sick; two have since died. Moostoos said, "My uncle, if I get worse knock me on the head. I do not want to hurt my children."

I was sick at that time. Napaysis was sick and very weak. Apishchikisaynis, Mihkoostikwahnis was lying in his house sick. We thought Napaysis was going Wehtigoo. Kunuksoos was taking care of Napaysis all that evening and night. I wanted to help to hold him, but he threw me away, Moostoos was very strong. I don't know about Mithkoostikwahnis being holding him. Napaysoosee, Chuckachuck, and Kunuksoos were the only three men strong enough to be of any use to hold him. Napaysis was sitting, lying near the

door, I was sitting between the body and the door, the body lay parallel to the front of the hearth. I was in my conjuring tent, and when Moostoos began to try to get up I came out and went close to him. Moostoos and Napaysis were being treated. I do not know whether Payoo came in. A Wehtigoo is a man that goes crazy and kills and eats people. I saw a young girl Wehtigoo not long ago. She got better. I am old. The practice has been to kill Wehtigoos, but it is not every one that can kill a Wehtigoo. It took the strongest medicine men to kill a Wehtigoo.

ENTOMINAHOO'S WIFE, MARIE, said:— I am Entominahoo's wife. I saw Moostoos when he was killed. I was in the shack when he was killed. I thought Moostoos was a Wehtigoo. I was frightened. Thought the evil spirit got in'o him. He was a good man before that. Never saw a Wehtigoo before. It is only my own husband that knows anything about Wehtigoos. A Wehtigoo kills by bodily means. Can't say if anyone could be tied up. We were sitting up all night. I did not see him move all night. Next morning some one came to another house and told us that he was getting up. We sat up because we were frightened, because we were afraid he would come alive again. I did not pour hot tea but I saw it brought in for that purpose. I heard some one say bring hot water and they brought tea. They drank the tea. I did not see the sticks on the ground, but I saw it sticking in the body. Napaysoosee might have spilt the tea. I did not help Napaysoosee to tie the legs. I saw Napaysoosee cut off the head. I did not see anyone drive a file into the body. I don't know why the the head was cut off.

He was covered with blankets when the blows were struck, not the head, only a part of his body. I knew Moostoos from long ago. We were all on good terms together. We all liked him.

KUNUKSOOS, sworn, said:— I am a Cree. I was present when Moostoos was killed, I heard him say (the day before) that the evil spirit was coming on him. This was said in the same house, I do not know of him saying anything else. Entominahoo was there doing nothing. I saw Entominahoo trying to cure him. That was after he said above I did not look at what he was doing, he did not say he could cure him. I did not see anyone holding Moostoos. I could not say if he was a Wehtigoo. I don't know how a Wehtigoo feels. I do not know if Entominahoo could cure him. I did not hear anyone say he was a Wehtigoo. We had nothing to drink. We drank some ginger long before, about ten days. We drank tea. We were having a tea dance. We had a tea dance for a week.

We all liked Moostoos. He was my son-in-law. He was married to Chuckachuck's sister. The night before he was killed, I thought there was something wrong with him. In the day time by the look of his eyes. The eyes were not quiet—rolling. I never heard him before. I could see his face from where I was sitting. First, I saw his face covered and after it was not covered. I did not hear him breathing hard. I was frightened. I thought Moostoos would kill us, and had been frightened for two or three days. I saw Eliza using the medicine belt. I saw Felix's wife there. I did not see her do anything. Felix's wife was lost and could not be found, That is why she

was not brought down. I saw her last there. I know the policeman was looking for her. She came to Slave Lake and from there went away. Wehtigoo is a man-eater, who wishes to kill his friends. I heard Moostoos say he was afraid he would go that way, that was the winter before. I was there in the shack. I saw Mihkooshtikwahniss in there that day. I saw the conjuring tent with Entominahoo inside. I never saw them all play the drum and sing. I am not a medicine man. Only Entominahoo was a medicine man.

KUNUKSOO'S WIFE, ELIZA said:—Was in shack when Moostoos was killed. He was talking and said, "I will kill you all to-night". Did not hear anyone say anything. Did not notice Entominahoo was very much afraid. Heard him say before this happened that he would try to cure Moostoos. He did try and could not cure him. I thought Moostoos was a Wehtigoo. I never saw any Wehtigoos, but they used to be killed. We hear about Wehtigoos all over where there are Indians. We were all frightened when Entominahoo could not cure him, we were afraid of Moostoos, the way he was acting. I did not hear them say they would do anything to him. I was surprised when I heard the blow. I thought in my mind that if he could not be cured it was as well he should die. I heard no one say "Let us kill Moostoos". They all thought it was better to kill him. I thought they were going to kill him, I don't know if they could have mastered him. I do not know other minds. He was stronger, and the stronger on account of the evil spirit. I could not say if they could have held him if he had not the evil spirit. I do not think anything else was the matter with him. I don't know what happens to the evil spirit when the man is killed. Entominahoo was our head man. I did not hear him say what ought to be done. After Chuckachuck struck, Moostoos did not move. I was looking at him. After Napaysoosee struck him he did not move. After Payoo struck him he did not move. I do not know that everyone ought to kill a Wehtigoo.

MOOSTOOS' WIFE, JULIE said:—I was told something was going to happen. I was told my husband was going to kill us all. My husband told me before that "It is better that I should be killed than that anything should happen to my children" (that he should kill them). I did not speak to Payoo before he left the shack.

I don't remember what he told me but it was not the same day. I did not know that my husband would be killed. I heard next morning that he was killed. I don't know who told me. I felt as if I was asleep the whole time. I did not go to see the body. I never saw it. I was frightened when I heard that my husband was killed. Did not know that my husband was a Wehtigoo. He said before he was going to be one. I did not know that he would have to be killed, if he was a Wehtigoo. I heard he was a Wehtigoo at the same time I was told he was a Wehtigoo. I did not think it was wrong to kill him.

NAPAYSOOSEE, sworn, said:—I knew Moostoos a long time. We were great friends. Moostoos was in the shack a whole day and a half the night before he was killed. I was in the house all that night. I heard Moostoos talk about the evil spirit. He said the evil spirit



was in him and had the better of him. I was baptized. I was never at confession. I was always in the woods, seldom around amongst Christians. I was never taught Christian doctrine. During the last day and night Moostoos was looking different than before. He looked by his eyes as if he was going to kill us all. His eyes were flashing and rolling all day. He said, "I look on those children as young moose, I would like to eat them." He said a great deal but I could not tell what it was. When I came in, in the evening, he was lying down. There were two blankets over him. There were people sitting round. The conjuring tent was not up but they put it up shortly. I think Kunuksoos and Apishchikisaynis put it up. They knew how to make it, they had made them often. It was made four or five feet from Moostoos. I saw his face then. There was no one holding him, but Eliza and Felix's wife were sitting beside him. Then his face looked worse than before. Entominahoo went into the conjuring teepee and tried to make medicine to cure Moostoos. Kunuksoos was beating the drum a little while. Eliza and Felix's wife were making medicine. I heard Eliza singing, but there was so much noise we could not understand the words. I mean the noise in the conjuring tent and the drum. Entominahoo was a long time in the tent and came out when he heard us calling out. We called out "We are all dead," when we saw that Moostoos was going to get up and master us. I was holding him. Chuckachuck, Eliza, and Felix's wife, I think Entominahoo was holding him after he came out of the tent. I was holding his wrist and gave it to Entominahoo, but he could not hold and was thrown to one side. Moostoos was making a noise and tried three times to get up, and stood up and jumped in the air. Everyone called out, "We are dead." At that time he said, "I will kill the whole of you this night." I heard him with my ears. We pulled him down, four of us, and got him on his back. I covered his face with a blanket. Then four of us, along with Entominahoo, held him. I held right arm. Chuckachuck left. Eliza left and Felix's wife right leg, all under the blanket. He was struggling hard. He tried to bite me twice but only caught the coat. He was very strong. We could not have held him much longer. He was throwing up his head and grinding his teeth. Eliza had a plaited worsted belt, a medicine belt. She had two other things in her hands, an axe and a pair of scissors. Eliza thrashed him with the medicine belt, standing at his left. Felix' wife had something in her hand, a bag and a piece of iron. She came round, and I am not sure what she did with it, but I thought she put it towards the breast. Eliza had the axe in her left hand when she was doing the whipping. Our faces were towards the ground as Eliza was whipping. I heard the sound of the beads on the blanket. I heard Eliza say something to Chuckachuck, it was, "Here my brother-in-law." Eliza handed Chuckachuck the axe. Eliza said no more. Chuckachuck gave Moostoos a blow on the left side of the forehead. The blanket was over his face. There was blood from the belt, and blood came from the cut. He never moved after that blow. I would have felt if he had moved. It was some time after that that I struck. Chuckachuck said, "You are a coward if you do not strike him, we will all be killed." Chuckachuck gave me a knife, someone gave me an axe. I think Entominahoo's wife gave me the axe, I gave a blow on the left

side and left the axe in the wound. I drove the knife into the bowels first and left it also in the wound. Payoo was in the other shack. He did not come in very soon. I could go about forty feet before Payoo came in. I heard a call before Payoo came in. It was, "We are all dead, come here and see." (I was one that called, Chuckachuck another). You have children, we will be killed, you are kind-hearted." As Payoo was giving the blow he said to the axe, "Don't jump back." He got the axe from somebody. I do not know who in the house. He did not bring it in. Payoo struck on the forehead. That was the last blow that was struck. We stayed there till daylight. It was my house. Apishchikisaynis and Kunuksoos and Napaysis went out. The rest stayed in. I don't know why they stayed there. We were sitting round the body. I thought he was dead. Chuckachuck told me we had better stay as he was afraid Moostoos would come to life again. I thought, and said in the morning he was coming to life. I thought I heard a noise in his body. Almost daylight something was done to the body. Payoo and I did something, and a woman, Entominahoo's wife, and I tied the legs. I don't know who told us. We tied the legs because we were afraid he would get up. Payoo and I struck that stick through the breast into the ground. We were afraid of him getting up, though he was dead already a long time. I think it was Entominahoo's wife told us. We stuck the stick in so that he could not get up. We believed he had an evil spirit in his body. We thought he had ice in his breast, therefore we poured tea into the body. We were going to melt the ice so we got the hot tea. We poured the tea in the same hole where the stick was driven in. I don't know who made the tea. It was brought in from outside. The man was dead while this was done. I was afraid he would rise again. I do not believe another man could rise, but that that man could. There was no person in that house in his right senses. I cut off the head. I was told to do it. That was the last thing that was done. Payoo was there, also, I think, Entominahoo and his wife, and Mihkooshtikwahnis, went out because he was frightened.

Cross-examined. Chuckachuck struck first. I was not aware of any movement from Moostoos. He was still breathing. Before I gave the blow he had stopped breathing. After I gave him the blow he was still breathing. When I gave the blow I struck through the blanket. I struck because my brother-in-law told me to. Entominahoo tried all his best to cure him, and because he could not cure him this happened. Entominahoo said he could do no more. All in the house were willing to kill him. They all heard what Moostoos said and they were all willing to kill him. Chuckachuck and I called out to the crowd, "We are going to die." We heard, "Try your best we will be all dead anyway." After that Eliza started to strike him with the belt. I thought then that he would have to be killed but did not say it. They were calling out when Payoo came in. If Moostoos had not had an evil spirit in him we could have held him down. I have heard of Wehtigoos twice before. Once saw the track of a Wehtigoo. When Indians know an Indian is a Wehtigoo they try to kill him.

PAYOO, sworn, said:—I was in the band when Moostoos was killed. I did not go in where Moostoos was till I gave a blow. I

could hear from outside what was going on inside. I could hear that there was a conjuring tent in the house and that they were making a noise. I heard the drum sometimes. I heard one singing, could not say who. It was not a woman. I went into that shack that night. I heard Napaysoosee calling, "Come and see him." I knew what was going on, they were making medicine for Moostoos. I was sitting with my brother-in-law and the women. I went into Entominahoo's shack. The two shacks were about thirty-five feet apart. When I went in I saw the man was dead. The body was all covered with blankets. He was lying alone, they had left him alone. I saw two axes and one knife. The knife stuck in the bowels, one axe stuck in the chest and the handle downwards. Chuckachuck and Napaysoosee were close to the body. Chuckachuck kneeling and Napaysoosee standing. Napaysoosee said to me, "He is going to rise from the dead when the sun gets so high, you will see." I was told by Chuckachuck and Napaysoosee to strike. I took an axe and struck. I thought on the body but it seems it was on the head. I felt afraid. I was thinking about my children. I was there till daylight. I heard about tying the feet. What I heard of Napaysoosee's story was correct. The first time I struck the stake it would not go in, and Napaysoosee made marks on it and made medicine and it went in right. I would not go near the house because I was afraid of Moostoos and the medicine work. I was not in the house before.

When I went in Moostoos was covered all but his feet. Napaysoosee was the only man who told me. When we were sitting in the other shack we heard the noise and the woman singing. I heard from the house what they were saying, I heard them saying that they were going to try and kill him with their medicines. I knew what they were going to die. Mihkooshtikwahnis told me Moostoos was going to be Wehtigoo. He said it would go hard with them if they could not do anything with Moostoos. It would be hard on them if they could not kill Moostoos. I did not go at once till I heard the noise calming down. I went because I was called over, as they were all frightened. They did not name me. I never looked under the blanket. I did not strike at once, nor till I was told to give the blow. I saw the man was dead. His arms were straight. There were two holding the blankets, the two women were sitting on one side.

First, he said, they were going to cure him, then they were going to try and drive the evil spirit out of him.

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Although the result of the trial is of no importance as far as the "study" is concerned, it may interest those who have read the foregoing condensed evidence to know that the jury after four hours' deliberation brought in a verdict of "not guilty" so far as Payoo was concerned, and "guilty" of manslaughter against Napaysoosee.

The Hon. Justice Rouleau quite agreed with the jury that notwithstanding the peculiar circumstances some punishment was necessary. Napaysoosee was therefore sentenced to imprisonment for two months.

## THE CARIBS OF GUIANA AND THE WEST INDIES.

REV. DR. W. R. HARRIS.

On the north end of the island of St. Vincent, West Indies, there is a level tract of country between the volcanic mountain La Soufriere and the sea, known as the Carib country. This district or reserve was allotted to the Indians after the rebellion of 1773 on condition of surrendering their arms and acknowledging the King of Great Britain as sovereign of the Island. Early in April, 1902, La Soufriere (4,048 ft.) awoke from its long sleep of ninety-two years and began to emit smoke. At 3 p.m., May 5th, a dense cloud of steam rose from the crater followed by tremendous detonations and a rain of ashes. The telegraph cables between Martinique and St. Vincent broke the same afternoon. The morning of May 5th the negro police, commanded by Captain Calder, escorted the Caribs, their wives, children and effects to Georgetown, and settled them on a deserted plantation outside of the zone of danger. Between twelve and one o'clock of May 7th, the roaring of the volcano was heard far out at sea, the lightnings were terrific. At the same hour the crater lake burst its cerements and the rivers Wallibou and Rabaca rushed towards the sea in raging floods of boiling water. This rush of boiling water cut off the escape of the fugitives from the windward side of the island, including the Carib settlement and caused the loss of two thousand three hundred lives. By the timely intervention of the government the Caribs were saved. On the afternoon of the 30th of October, 1902, accompanied by Captain Calder, I visited these Indians on their new reservation. The tribe numbered two hundred all told and were not unlike a group of Mississaugas I had seen at Wikwimikong, on Manitoulin Island. They were skilful fishermen, clever basket-makers and adepts in many curious arts. They retained their old language and their old manners, and except that they no longer went to war nor ate their prisoners, lived according to their old habits. By the census of 1891, we learn that there are on the island of Dominica three hundred and nine Caribs, and on Trinidad about one hundred and forty of the aboriginal tribe. Taking no account of those known as the black Carib—offspring of escaped slaves and Indians, the present population of the Caribs, of the West Indies, is from six to seven hundred, confined to the islands of St. Vincent, Dominica and Trinidad. When in Georgetown, British Guiana, I passed some days with Mr. Evans, the city librarian, who most courteously permitted me to consult all the books and manuscripts in the library, treating of the Caribs, from the discovery of Guiana to the present day. Historians and writers for the past four hundred years differ so much in their opinions of these aborigines that it is impossible to frame a true estimate of their character. Fernando Columbus, son of the great navigator, says in his diary: "These savages are almost negroes in color, they are bestial in their habits and go naked. In all respects they are very rude, eating human flesh and devouring their fish raw as they catch them. They are false, cruel, treacherous and revengeful; lacking humanity, victims of instinct and impulse. They have the kind of social instinct found in animals, but

are unable to ascend to a conception of a universal law which binds all nations in a common brotherhood." Again, Davies, the historian of Dominica, writes in 1666. "The island is inhabited by hordes of hostile savages, who dwell among horrid and unnatural scenery, infested by an infinite number of reptiles of dreadful bulk, monstrous serpents. Refugee slaves flee to them, (the savages) intermarry and beget black Caribs." Sir Walter Raleigh contended for the bravery and chivalry of the Caribs of the Orinoco, and Bryan Edwards in his History of the West Indies says, "the Caribs were found all over Guiana from the Orinoco to Brazil and in some of the West Indies. They were men of undoubted courage, and superior in intelligence to those of the interior." That races of Anthropophagi were known to exist before the time of Columbus is attested by many historians and travellers but they were not called *Cannibals* till after the discovery of the West Indies and the Orinoco river. Shakespeare was among the first of English writers to associate the word cannibal with man-eaters when in act iv. of *Coriolanus*, he makes one of his characters say: "And he had been canibally given he might have broiled and eaten him too." The name is of Spanish origin. Many of the early writers used *caribal* and *canabal* indifferently. It is, probably, from the latin *canis*, a dog.\*

Even in 1837, when William Hillhouse visited the tribes on the banks of the Cuyuni, he described the Caribs as "lazy, drunken and faithless; at the best, proud, filthy and unsteady. All Indians are gluttonous, but the Caribs will outeat all other tribes," writers such as Mack (1803), Schomburgk (1826), Clements and Van der Loth picture them as brave and fearless, cunning in strategy, and excelling in endurance. From my studies of the sources of information within my reach, I am of the opinion that he was as closely allied to our Iroquois in habits, customs, skill in attack, fierceness and endurance as it was possible for one savage tribe to resemble another, taking into account the variations of climate, forest life and the conditions of existence. In the beginning of the eighteenth century, Père Labat, a French missionary, paid a visit to the West Indies. He was an observant traveller and had passed some time with the Seminoles of Florida, and with the tribes along the Ohio and the banks of the Mississippi. Froude in his "English in the West Indies," pauses to speak eloquently of his scholarship and accuracy. When Labat visited Dominica, a tribe of original Caribs inhabited the island forests living their old life, and except that they were then professing Christians and no longer ate their captives, following their old habits. The père was an expert linguist and, before philology had become a science, was a student of languages. From the speech of the Caribs, he concluded that they were of the same race as the North American Indians. Their dialect bore a striking affinity to that of some of the nations he had visited in his travels. They called themselves "Banari" that is, come from over the sea. Unfortunately there are no records, monuments or ancient remains to testify to their past history. They may have hunted in these desolate forests before the Redemption, or they may have antedated the Noachic flood. Their customs and habits prove them to be indigenous.

\* Some derive it from *caro*, *carnis*, flesh.

but certain oriental remains of prehistoric days show that they are not autocthonous. Hatchets of polished diorite or serpentine, arrow heads of argillite, chalcedony and obsidian found near Bayane, Demerara; relics discovered in caves near Cape Maise, and deposits of human remains called "caneys," indicate great age. Ask the young Indian of Guiana about his dead father, and he will tell you his father was famous for slaying cougars, serpents and caymans, and noted in the chase of the tapir, the wild boar and jaguar, but of his grandfather he remembers nothing. On the Cuyuni river and tributaries of the Berbice are mountain rocks whose river faces are carved with cabalistic characters and picture writings called "Timberi" by the learned societies of Demerara. No man has yet deciphered them, and, like the hieroglyphics on the Palenque tablets of Yucatan, they are the despair of the learned. By whom these rocks were cut, with what instruments, at what time, and for what purpose, no one knows, but they are all that exist to tell unto civilized man that other men of a strange race sailed these far inland rivers before him.

And now, let us attempt to trace the affinity of habits customs, manners and polity existing between these Indians of the Guianas—British and Dutch—and the tribes of our own country. At the present time, there are five nations or tribes in Guiana commonly known by the names of Warow, Arowak, Acowais, Macoushi and Carib. The five are practically one great family,—sprung from a common stock, but differing in dialect and local customs as the Huron and Iroquois were distinct from the Attiwandarons, though of the same root. Each of these tribes has its own great Council House or "Tabouy" where feasts are celebrated, affairs of state discussed, meetings held, and deputations received. They live in small villages consisting of twelve or fourteen carbets or palm cabins. These bourgs are always constructed near a river or small lake where the fishing is good and the land fertile. Each family clears for itself a plot of ground, and plants it with pepper, papaw, cassava, plantains, sweet potatoes and pine apples. They keep no cows, horses, goats, fowl or sheep. They are expert hunters and skilful in the use of the arrow, blow pipe and spear. Their canoes—woodckins they are called in Guiana,—are made like our own, and in the handling of the pagaye or paddle they have no superiors. Many of them have been converted to Christianity, but numerically they are still pagan. Association with the whites has debauched those near the plantations and towns, and sinking under impoverished resources they are gradually decreasing. In Georgetown, the capital of Demerara, there is a large covered market-place or bazaar where the Indians meet from time to time. They bring with them parrots, bows, arrows, monkeys, and birds of beautiful plumage which they sell to sailors and visitors. The proceeds of their sales are too often squandered in rum for which they have an unconquerable relish. Such is the condition of the Indians of Guiana to day.

Let us now rapidly trace their life as it was in the old days. There is no record to prove that the Indians of lower Venezuela ever professed any religion, or practised any religious ceremony. "I believe if the truth were known," writes Charles Waterton, the ornithologist, who spent years in the forests of Guiana in the beginning

of the nineteenth century, "the Indian never offers up a single prayer or ejaculation to God". In another chapter of his "Wanderings in Guiana," he states they beseech Yambrabin, the god of evil, not to harm them, never addressing a petition to Wacinaci, the great spirit whom they believed to be too good and loving to do them harm. Every tribe, however small, was ministered to in disease and sickness by a Pay-i-man (Shaman). He was conjurer, soothsayer, physician, priest and clairvoyant. When anything was lost he was consulted, and when anyone was sick he rattled the calabash around them and besought the evil spirits to go away to their enemies. If a fever attacked the village, the Pay-i-man went through the village street, and around the cabins, howling, beating the sides of the shacks, and imploring, with dreadful imprecations, the evil spirits to depart. If the fever continued, proving his incantations too feeble for the visiting devils, they abandoned the site forever, and began a new settlement in another part of the forest. They never killed or injured the owl or goat-sucker—birds of omen or reverential dread. They were regarded as the living tabernacles of departed souls who, unable to rest in the spirit-world, returned with the permission of Yababion, the Demarara Indian devil, to haunt their enemies and avenge the wrongs done upon them in their days of nature. If a goat-sucker, a night bird, perched on an Indian's cabin and began its weird and plaintive dirge, misfortune or death was sure to follow and they awaited the event in terrible suspense. A day's march beyond the great falls and rapids of the Essequibo river, two immense rocks tower aloft upon the summit of a neighbouring hill. Their situation and their extraordinary shape strike the traveller with awe, and bear in upon him an impression of ancient grandeur he can never forget. From time immemorial these rocks were supposed to be the abode of an evil spirit who demanded and received from the passing Indian a tribute of tobacco smoke as a peace-offering.

The tribes were subject to few diseases apart from smallpox, diseases of the lungs, and peculiar throat troubles. The yaws was a common disease with which they were and are afflicted. The yaws manifests itself in large ulcers. When the ulcers assumed a yellow appearance, the patient was carried to the river and after his sores were washed he was rubbed with boiled lime juice mixed with charcoal.

Funeral ceremonies were not always the same among the nations. Among the Arowaks, after the dead body was washed and the head anointed with oil, the corpse was placed in a hammock and buried in a sitting position. The arms, pipe, and trappings of the dead man were buried with him so that he might enter the hunting-grounds of the spirit-world, and with bow, arrows, and blow-pipe fittingly set out upon his new life.

The Caribs, like the Neutrals, retained the dead in their cabins for a month, and when the odour of decomposition became insupportable, they buried the corpse with the oldest of the living wives. After a year the bones were taken from the grave, cleansed and placed in a basket which was hung from the rafters of their dwellings.

The war-chief was elected by the tribal warriors after undergoing a frightful ordeal. He had no voice in the great council which was

presided over by a national chief, who settled the internal and foreign action or policy of the tribe. Before the honor of election to the office of first warrior of the nation was conferred upon a brave he must, already, have given proofs of his fitness for the office. Of his endurance, bravery, and cunning, there could be no doubt. He was familiar with the haunts of wild animals, their migrations and habits. He was acquainted with the enemy's country, the springs of water and the forest trails. When notified of his selection for leadership he entered upon a preparatory fast of three days. After the completion of his fast he strode into the Council House accompanied by two companions who repeatedly spoke words of encouragement to him, and exhorted him to be brave. Accompanied by the councillors he walked to an adjoining field, and in the presence of the assembled spectators removed his tournoue, or loin cloth, placed his hands clasped upon his head and calmly awaited the torture. Two warriors now strode into the ring armed with maquaries or twisted whips of the pita wood. The flagellation that followed was frightful. The blood trickled down his naked body and ribbons of skin fell away from his bronzed back. He was then placed on a barbecot or wooden grate, under which a fire was started. If he fainted, he was lifted off and sprinkled with water. If he endured this torture unmoved and showed no fear, he was hailed as war chief of the nation amid the plaudits of the men and the caresses of the women. Before entering the war-trail the warriors tattooed their bodies with racou dye and perfumed them with the extract of the hayawa, or acouri plant.

The campaign was conducted on lines similar to those of the American Indian. All prisoners taken in war were either killed or held in slavery. Torturing by fire may have been practised but there is no record to prove it. It is probable that cannibalism obtained among all the tribes of Guiana, but the early Spanish adventurers having dealings only with the Caribs of the West Indies, Trinidad and the Orinoco, confined the practise to this nation. Human flesh was not their ordinary food. They boucanned\* or smoke-dried the limbs of famous warriors whom they had slain in battle or took prisoners, and at special festivals handed them around to be gnawed, hoping, like the Iroquois to inherit some of their enemies' courage.

When a Guiana Indian wished to marry, everything was arranged for him by the parents, relatives, and intimate friends of the girl. The young man presented himself on an appointed day before the hut of his prospective father-in-law, when, after listening to an exhortation from one of the nearest relatives of the girl, and receiving the consent of her parents, the ceremony closed with singing, dancing, and drinking of a fermented liquor called *piuarri*, the bridegroom brought his wife to his own shack. Polygamy was a common practice, and the wives were garden and household drudges. When a woman gave birth to twins she killed and secretly buried or drowned one of the infants to avoid the suspicion of adultery. Strangely enough the tribes in the valley of the Orinoco circumcised their children on the eighth day. These were the Salivas, the Guamios and the Othomas. When and

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\*From Caribbean *boucan*, a place for smoking meat, hence our word buccaneer, one who consorted with the natives, and played pirate.



where did they acquire this Phœnician and Hebraic custom? ("Beschryving van Guiana," by I. I. Hartsuik, 1770).

Descent and succession among the Demerara tribes were in the female line, the same as among the Huron-Iroquois and many other primitive peoples in various parts of the world.

Morals, in the technical sense, they had none, but having no knowledge of the law they could not commit a breach of the law. They were "naked and not ashamed."

Among some of the tribes of lower Cayenne the "Couvade" obtained. When the warrior's wife was confined for the first time he betook himself to his hammock, which hung from the roof. His only food for three weeks was a small allowance of cassava and water. When his fast and lying-in were completed he left his hammock. His breast and back were then scarred with the teeth of the acouri and after receiving a few lashes from a pita whip he left his home for a few months and became a servant to some distant neighbor. Such was "La Couvade" which led the early Spanish legendists to report that in Cayenne the men, and not the women, were confined.\*

When Columbus visited the West Indies, the Caribs held possession of the islands of St. Vincent, Dominica, Trinidad and Martinique. Of the four tribes which soon after began to trade with the Spaniards and the Dutch, the Carib population was roughly estimated at 140,000, about a fourth of whom were settled between the rivers Corentyne—now the boundary between British and Dutch Guiana, and the Essequibo, dividing Venezuela and British Guiana. The tribal lands of the great body of the Caribs stretched through the delta of the Orinoco and the district to the north-west of the river known to this day as Caribiana. The estimate of Major John Scott, made in 1666, makes the population of British Guiana, as far as the Orinoco, to be 28,000 families of Caribs and 8,000 "fires" of Arowaks. Scott's census takes no account of the Acowais and Warows. All these nations traded with the British, Spanish and Dutch, exchanging tobacco, cotton and spices for trinkets and rum. Even as late as 1795, Captain Alexander, in his "Transatlantic Sketches," says that in the rebellion of that year eight hundred Carib warriors took the field. The Carib population of the West Indies and Guiana, at the present time, numbers from six to eight thousand; and the people live as their forefathers did by hunting and fishing. Anyone at all familiar with the history of the Huron-Iroquois nations will at once detect a striking similarity between them and the Indians of Guiana in many of their customs, habits and ceremonies. Particularly is this pronounced in their village life, their great Council House, their war chiefs and judicial chiefs, in the build of their canoes, in their belief

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\* The Korovans of Madras, Tylor, Vol. I, p. 76, "Primitive Culture," the Eskimo of Greenland, Egedis' "Greenland," p. 196; and the Coroados of Brazil, "Spix and Martin's Travels," Vol. II, p. 247, have similar customs. Giliz, de Tertire, Fermin, Biet and Brett refer to the custom in Guiana and other South American countries.

It is practised in Yunnan, China; by the Dyaks of Borneo; and in Europe we find it in Corsica, in the south of France and in the north of Spain.

Crawley also mentions the practice as existing among the Digger Indians of California; and "In Zarzandan, and amongst the Ainus, Miris, and Miaos, the Lagunero and Ahomama, the Caribs, and in Martinique, Surinam, Brazil, amongst the Jivaros, Mundurucus, Macusis, Arowaks and Arecunas, and in Wanga, Malabar and the Nicobars." "A study of Primitive Marriage," by E. Crawley, p. 419.

in good and evil spirits, descent in the female line, and the identity of ceremonies practised by both in exorcising evil spirits from the bodies of the deceased and the fever-stricken villages. Again, take their fear of the demon-haunted rocks and the propitiation of the evil genii with tobacco smoke, or look into their treatment of the dead, their belief in the spirit world, the sitting burial and the buried arrows, blow pipes, bows and outfit for the land of ghosts. Once again study the motive of the Carib and Iroquois in eating the flesh of a brave enemy, their rock inscriptions and the preparatory fast of the war chief. Unfortunately, I could not obtain any grammar or dictionary of the Carib language, and therefore am unable to verify by comparison Père Labat's statement, that the dialect of the Caribs was identical with that of some of the tribes he had visited in North America.\*

Their method of counting, too, is to us, somewhat peculiar. They have simple words for one, two, three and four, but for five the Arowaks say abar-dahk-abu "one hand and so on, up to nine but ten is biam-dahk-abu, meaning two hands." Above ten and up to twenty the name of the numerals refer to their toes (kooti). Thus eleven is expressed by abar-kooti-bana, and twelve biam-kooti-bana. When twenty is reached they say "one man", abar-loku.

Similarly, the Carib word for ten means "both hand fingers" and for twenty, "both hand fingers, and both feet toes."

Many primitive peoples count in this way, or in some such way, and our own word five is claimed by Humboldt to be connected with the Persian word *pendji*, a hand.

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\*The island Caribs have two distinct vocabularies, one used by men and by women when speaking to men, the other used by women when speaking to each other, and by men when repeating *oratio obliqua* some saying of the women. Their councils of war are held in a secret dialect or jargon, in which the women are never initiated. It has been suggested that this inconvenient custom, according to which a Carib needs to know, like Ennius, three languages, is due to exogamy, husband and wife retaining the languages of their original tribes respectively. This explanation, however, does not account for the marital dialect, and has been refuted by Mr. im Thurn on other grounds. *The Mystic Rose*, by E. Crawley, pp. 46-7.

## Robert Thomas Anderson.

"ROBERT T. ANDERSON, who lost his life by drowning at Go Home, Georgian Bay, on June 16th, 1903, was one of the most brilliant members of the class of '04, and his whole undergraduate career gave promise of a successful future. He was born at Elora, in 1878, but received his school training at Barrie and Aylmer. The foundation of his education was laid at home, and not until he was twelve years old did he enter the public school, at Barrie. In two years he was ready for the high school, and passed the entrance examination at the head of his class. In 1894 the family removed to Aylmer. Here he matriculated in 1899, and entered Victoria with the class of '03. Next year he was compelled to leave college, but he returned with the class of '04, of which he was a member at the time of his death.

From his earliest years he showed a great love for nature, and this deepened into the great passion of his life. "Bob's" botanical and mineralogical collections, as well as those of insects, and birds, and their nests and eggs, were very large, and ranked among the best in the country. He was also a skilled taxidermist. *Acta Victoriana*, Oct. 1903.

It was in the Archæological field that Mr. Anderson was best known to us. His work along this line, he conducted quite as intelligently and as enthusiastically as if it had been his special subject of study, and what he did, he did thoroughly.

Much that many would be disposed to regard as trivialities, he refused to look at in this light, and the results he sometimes reached, showed the value of his patient investigations.

Since boyhood he evinced much interest in the archæological work of the Provincial Museum, and last year he presented to it a large number of excellent specimens.

Mr. Anderson was as modest as he was bright. He was perfectly free from any exhibition of that conceit which is so often offensive in young men of a scientific turn, yet he had the courage of his convictions, and maintained with firmness any position he thought was right.

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